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**PART A**  
**IONOSPHERIC DATA**

**ISSUED**  
**FEBRUARY 1964**

**U. S. DEPARTMENT OF COMMERCE**  
**NATIONAL BUREAU OF STANDARDS**  
**CENTRAL RADIO PROPAGATION LABORATORY**  
**BOULDER, COLORADO**



CRPL-F 234  
PART A

NATIONAL BUREAU OF STANDARDS  
CENTRAL RADIO PROPAGATION LABORATORY  
BOULDER, COLORADO

Issued  
24 Feb. 1964

## IONOSPHERIC DATA

### CONTENTS

	<u>Page</u>
Ionospheric Data . . . . .	ii
Table of Smoothed Observed Zurich Sunspot Numbers . .	iii
World-Wide Sources of Ionospheric Data . . . . .	iv
Erratum . . . . .	vi
Tables of Ionospheric Data . . . . .	1
Graphs of Ionospheric Data . . . . .	26
Index of Tables and Graphs of Ionospheric Data in CRPL-F234 (Part A) . . . . .	51

## IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Central Radio Propagation Laboratory for the exchange and distribution of ionospheric and related geophysical data. Part A, "Ionospheric Data," and Part B, "Solar-Geophysical Data," of the CRPL-F series present a variety of data in convenient form for use in research in radio propagation and the ionosphere and in other geophysical problems.

The current form of the tables of ionospheric data provides the monthly medians and, in addition, the number of values entering into the median determination (count) for all ionospheric characteristics listed. Also, when available, the upper and lower quartile values indicated by UQ and LQ in the tables, are listed for  $f_oF_2$ ,  $h'F_2$ ,  $h'F$ , and  $M(3000)F_2$ . Quartile values are not listed for the other characteristics because of space limitations. The tables are prepared by IBM machine methods.

Beginning with CRPL-F221, Part A, "Ionospheric Data," the hourly median values for the graphs of critical frequencies and  $M(3000)F_2$  were plotted by machine methods instead of manually, as in earlier issues. Graphs of critical frequencies and  $M(3000)F_2$  will continue to appear. Graphs of percentage of time of occurrence for  $fEs$  and virtual heights of the regular ionospheric layers are no longer included. Data on percentage of time of occurrence of  $fEs$  above 3, 5, and 7 Mc are available from the CRPL and the IGY World Data Center for Airglow and Ionosphere.

For many years, the tables of ionospheric data appearing in the F series, Part A, listed values of medians recomputed at CRPL. While this practice enforced a certain uniformity, it was subject to some valid criticism for tampering with the original data. The tables and graphs now show the ionospheric data as they are provided by the originating laboratory. Responsibility for the accuracy and reliability of the data rests entirely with the originator.

Medians of data for the U.S. stations are computed in accordance with the recommendations of the World-Wide Soundings Committee. Data will appear in the F series, Part A, only when the complete daily-hourly tabulations have been received by the CRPL or the IGY World Data Center A for Airglow and Ionosphere.



Information on symbols, terminology, and conventions may be found in the "URSI Handbook of Ionogram Interpretation and Reduction, of the World-Wide Soundings Committee," edited by W. R. Piggott and K. Rawer (Elsevir, 1961), which supersedes previous documents. A list of symbols is available from CRPL on request.

The following table contains the latest available information on smoothed observed Zurich sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1962, the succeeding values being based on provisional data.

Smoothed Observed Zurich Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1954				3	4	4	5	7	8	8	10	12
1955	14	16	19	23	29	35	40	46	55	64	73	81
1956	89	98	109	119	127	137	146	150	151	156	160	164
1957	170	172	174	181	186	188	191	194	197	200	201	200
1958	199	201	201	197	191	187	185	185	184	182	181	180
1959	179	177	174	169	165	161	156	151	146	141	137	132
1960	129	125	122	120	117	114	109	102	98	93	88	84
1961	80	75	69	64	60	56	53	52	52	51	50	49
1962	45	42	40	39	39	38	36	34	32	31	30	30
1963	29	30	30	29	29	27	28					
1964												

Units of Ionospheric Data Tables

foF2, foEs - - - Tenths of a megacycle  
 foF1, foE - - - Hundredths of a megacycle  
 h'F2, h'F, h'E - Kilometers  
 M(3000)F2 - - - Hundredths

NOTE: Occasionally, when the median falls between two of the observed values, the median is carried an extra decimal place beyond these units. Those cases are easily identifiable by the extra digit appearing to the right of the number, in a column usually left blank.

MED - Median  
 CNT - Count  
 UQ - Upper Quartile  
 LQ - Lower Quartile

## WORLD - WIDE SOURCES OF IONOSPHERIC DATA

THE IONOSPHERIC DATA GIVEN IN TABLES 1 TO 100 AND FIGURES 1 TO 100 WERE ASSEMBLED BY THE CENTRAL RADIO PROPAGATION LABORATORY FOR ANALYSIS, CORRELATION AND DISTRIBUTION. THE FOLLOWING ARE THE SOURCES OF THE DATA IN THIS ISSUE.

COMMONWEALTH OF AUSTRALIA, IONOSPHERIC PREDICTION SERVICE OF THE COMMONWEALTH OBSERVATORY.

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WHITE SANDS, NEW MEXICO



NATIONAL BUREAU OF STANDARDS, UNITED STATES OF AMERICA.  
(CENTRAL RADIO PROPAGATION LABORATORY).

MAUI, HAWAII

TALARA, PERU (INSTITUTO GEOFISICO DEL PERU)

ERRATUM

CRPL-F232, Part A, p. 18, table 72, Huancayo, Peru, December 1962 data: The foF2 section of the table is in error. Please substitute the table below for table 72 in F232, Part A. Corresponding changes should be made in the foF2 curve in figure 72 of F232, Part A, also.

TABLE 72																						TIME 75.0W			
HUANCAYO, PERU										(12.05, 75.3W)															
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED CNT UQ LQ	43 6 52 31	38 6 45 25	23 5 31 17	18 8 40 16	18 17 30 50	53 31 56 69	73 31 76 69	82 30 86 77	87 29 93 82	90 30 94 81	86 30 94 80	85 27 92 77	85 29 100 80	91 29 100 82	96 26 101 88	99 27 104 90	95 28 106 86	95 29 106 90	92 30 99 86	80 23 86 77	69 18 76 63	56 12 77 52	58 7 64 42	
h'F2	MED CNT UQ LQ							1	298 12 312 290	332 14 350 320	360 25 372 348	365 26 380 350	360 24 380 340	360 23 380 340	355 23 365 335	330 11 340 320	310 7	1							
h'F	MED CNT UQ LQ	282 14 325 270	295 12 340 250	298 8 330 245	298 8 330 245	280 12 350 240	280 12 350 240	225 31 290 210	210 31 275 200	195 30 260 190	190 30 255 185	190 30 255 185	190 30 255 185	190 30 255 185	190 30 255 185	200 27 260 190	E 405 400	235 28 240	255 30 260	260 30 270	270 30 280	285 30 290	318 20 320	305 15 310	
M(3000)F2	MED CNT UQ LQ	292 6 305 280	322 6 340 310	322 6 340 310	322 6 340 310	325 15 340 310	325 15 340 310	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	310 11 325 290	
foF1	MED CNT								440 7	450 15	450 15	450 15	450 15	450 15	450 15	450 15	450 15	450 15	450 15	450 15	450 15	450 15	450 15	450 15	450 15
foE	MED CNT								185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28	185 28
h'E	MED CNT								124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28	124 28
foEs	MED CNT	41 17	18 20	17 17	18 18	19 20	19 20	27 31	41 29	70 27	74 27	74 27	74 27	74 27	74 27	74 27	74 27	74 27	74 27	74 27	74 27	74 27	74 27	74 27	74 27

DATE: 144 MC TO 254 MC IN 1 MINUTE 48 SECONDS.

DECEMBER 1962



## TABLES OF IONOSPHERIC DATA

When a "less than" sign occurs on the graph of the E-layer frequency and a corresponding qualifying E is not found in the table, the corresponding description is "below" or "less than" and is not printed in the table.

the tab

FT. MONMOUTH, NEW JERSEY																										190-04N, 74-18H																TIME 750-0			
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23																				
f6F	MED CNT	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U																				
	GND	31	27	24	23	30	38	45	48	50	50	50	50	50	48	50	51	51	54	55	56	58	53	42	38																				
	LO	16	21	24	22	19	25	26	24	26	28	28	28	28	27	29	28	28	28	28	28	28	28	28	28																				
	HI	30	28	24	21	20	28	35	40	42	44	46	47	46	44	46	48	48	50	50	52	52	48	40	36																				
nF2	MED CNT	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U																				
	GND	31	27	24	23	30	38	45	48	50	50	50	50	50	48	50	51	51	54	55	56	58	53	42	38																				
	LO	16	21	24	22	19	25	26	24	26	28	28	28	28	27	29	28	28	28	28	28	28	28	28	28																				
	HI	30	28	24	21	20	28	35	40	42	44	46	47	46	44	46	48	48	50	50	52	52	48	40	36																				
nF	MED CNT	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U																				
	GND	31	27	24	23	30	38	45	48	50	50	50	50	50	48	50	51	51	54	55	56	58	53	42	38																				
	LO	16	21	24	22	19	25	26	24	26	28	28	28	28	27	29	28	28	28	28	28	28	28	28	28																				
	HI	30	28	24	21	20	28	35	40	42	44	46	47	46	44	46	48	48	50	50	52	52	48	40	36																				
M3000/F2	MED CNT	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U																				
	GND	31	27	24	23	30	38	45	48	50	50	50	50	50	48	50	51	51	54	55	56	58	53	42	38																				
	LO	16	21	24	22	19	25	26	24	26	28	28	28	28	27	29	28	28	28	28	28	28	28	28	28																				
	HI	30	28	24	21	20	28	35	40	42	44	46	47	46	44	46	48	48	50	50	52	52	48	40	36																				
f6I	MED CNT	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U																				
	GND	31	27	24	23	30	38	45	48	50	50	50	50	50	48	50	51	51	54	55	56	58	53	42	38																				
	LO	16	21	24	22	19	25	26	24	26	28	28	28	28	27	29	28	28	28	28	28	28	28	28	28																				
	HI	30	28	24	21	20	28	35	40	42	44	46	47	46	44	46	48	48	50	50	52	52	48	40	36																				
f6E	MED CNT	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U																				
	GND	31	27	24	23	30	38	45	48	50	50	50	50	50	48	50	51	51	54	55	56	58	53	42	38																				
	LO	16	21	24	22	19	25	26	24	26	28	28	28	28	27	29	28	28	28	28	28	28	28	28	28																				
	HI	30	28	24	21	20	28	35	40	42	44	46	47	46	44	46	48	48	50	50	52	52	48	40	36																				
n'E	MED CNT	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U																				
	GND	31	27	24	23	30	38	45	48	50	50	50	50	50	48	50	51	51	54	55	56	58	53	42	38																				
	LO	16	21	24	22	19	25	26	24	26	28	28	28	28	27	29	28	28	28	28	28	28	28	28	28																				
	HI	30	28	24	21	20	28	35	40	42	44	46	47	46	44	46	48	48	50	50	52	52	48	40	36																				
f6En	MED CNT	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U																				
	GND	31	27	24	23	30	38	45	48	50	50	50	50	50	48	50	51	51	54	55	56	58	53	42	38																				
	LO	16	21	24	22	19	25	26	24	26	28	28	28	28	27	29	28	28	28	28	28	28	28	28	28																				
	HI	30	28	24	21	20	28	35	40	42	44	46	47	46	44	46	48	48	50	50	52	52	48	40	36																				

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

TABLE 3  
(24-30-127-EE)

[illegible]

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

TABLE 24\*

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	U
f6F	MED	36	34	31	30	32	42	47		49	51	52	56	58	57	58	50	61	65	64	65	57	47	36		
	ENT	42	38	37	34	32	36	44		51	53	60	57	60	62	64	60	71	66	68	72	68	71	61	50	45
	LO	30	30	31	30	27	29	38	42		44	48	50	50	54	54	54	54	56	59	54	63	61	53	41	33
f7F	MED					312	309			330	370	366	360	354	372	370	348	335	301	276						
	ENT					460	417			618	620	600	600	588	640	630	550	530	315	362						
	LO					253	276			268	310	336	346	325	332	330	327	305	295	262						
f8F	MED	278	276	266	270	268	249	220	208		200	184	185	190	186	204	210	225	225	230	259	220	219	230	265	
	ENT	250	211	210	211	211	211	211	211		220	210	220	240	220	210	220	265	240	240	260	235	220	250	273	
	LO	250	250	250	260	250	239	209	204		189	180	179	176	180	200	185	203	210	217	229	210	210	220	240	
M3000IF2	MED	305	310	312	310	310	330	320		310	295	290	285	300	302	295	300	305	310	315	315	335	335	325	310	
	ENT	319	317	318	318	318	311	311		311	311	311	310	310	315	310	305	312	325	325	330	335	330	320		
	LO	295	300	302	306	300	310	295		285	280	285	260	290	280	285	290	300	308	302	315	325	320	305	308	
f6FI	MED							370		405	430	440	450	450	445	440	420	4	390							
	ENT						3	9		10	9	9	8	10	10	9		4	6							
f6E	MED									1																
	ENT																									
f7E	MED						110	103		109	100	100	100	100	100	106	105	101	107							
	ENT						10	10		11	11	11	11	11	11	11	10	9	8	7	3	1				
f8E	MED	35	32	44	32	27	29	30		36	43	50	44	45	39	41	44	52	44	38	31	27	30	42	36	
	ENT	11	10	10	8	9	4	11	11	11	11	11	11	11	11	11	10	10	10	10	10	7	8	8		

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

Observations taken 1st through 11th only.

TABLE 4	
DEFINITION OF $\mathcal{C}_1$	$(\Delta u, \Delta v)$
DEFINITION 1	$(0, 0)$
DEFINITION 2	$(0, 0)$
DEFINITION 3	$(0, 0)$
DEFINITION 4	$(0, 0)$
DEFINITION 5	$(0, 0)$
DEFINITION 6	$(0, 0)$
DEFINITION 7	$(0, 0)$
DEFINITION 8	$(0, 0)$
DEFINITION 9	$(0, 0)$
DEFINITION 10	$(0, 0)$
DEFINITION 11	$(0, 0)$
DEFINITION 12	$(0, 0)$
DEFINITION 13	$(0, 0)$
DEFINITION 14	$(0, 0)$
DEFINITION 15	$(0, 0)$
DEFINITION 16	$(0, 0)$
DEFINITION 17	$(0, 0)$
DEFINITION 18	$(0, 0)$
DEFINITION 19	$(0, 0)$
DEFINITION 20	$(0, 0)$
DEFINITION 21	$(0, 0)$
DEFINITION 22	$(0, 0)$
DEFINITION 23	$(0, 0)$
DEFINITION 24	$(0, 0)$
DEFINITION 25	$(0, 0)$
DEFINITION 26	$(0, 0)$
DEFINITION 27	$(0, 0)$
DEFINITION 28	$(0, 0)$
DEFINITION 29	$(0, 0)$
DEFINITION 30	$(0, 0)$
DEFINITION 31	$(0, 0)$
DEFINITION 32	$(0, 0)$
DEFINITION 33	$(0, 0)$
DEFINITION 34	$(0, 0)$
DEFINITION 35	$(0, 0)$
DEFINITION 36	$(0, 0)$
DEFINITION 37	$(0, 0)$
DEFINITION 38	$(0, 0)$
DEFINITION 39	$(0, 0)$
DEFINITION 40	$(0, 0)$
DEFINITION 41	$(0, 0)$
DEFINITION 42	$(0, 0)$
DEFINITION 43	$(0, 0)$
DEFINITION 44	$(0, 0)$
DEFINITION 45	$(0, 0)$
DEFINITION 46	$(0, 0)$
DEFINITION 47	$(0, 0)$
DEFINITION 48	$(0, 0)$
DEFINITION 49	$(0, 0)$
DEFINITION 50	$(0, 0)$
DEFINITION 51	$(0, 0)$
DEFINITION 52	$(0, 0)$
DEFINITION 53	$(0, 0)$
DEFINITION 54	$(0, 0)$
DEFINITION 55	$(0, 0)$
DEFINITION 56	$(0, 0)$
DEFINITION 57	$(0, 0)$
DEFINITION 58	$(0, 0)$
DEFINITION 59	$(0, 0)$
DEFINITION 60	$(0, 0)$
DEFINITION 61	$(0, 0)$
DEFINITION 62	$(0, 0)$
DEFINITION 63	$(0, 0)$
DEFINITION 64	$(0, 0)$
DEFINITION 65	$(0, 0)$
DEFINITION 66	$(0, 0)$
DEFINITION 67	$(0, 0)$
DEFINITION 68	$(0, 0)$
DEFINITION 69	$(0, 0)$
DEFINITION 70	$(0, 0)$
DEFINITION 71	$(0, 0)$
DEFINITION 72	$(0, 0)$
DEFINITION 73	$(0, 0)$
DEFINITION 74	$(0, 0)$
DEFINITION 75	$(0, 0)$
DEFINITION 76	$(0, 0)$
DEFINITION 77	$(0, 0)$
DEFINITION 78	$(0, 0)$
DEFINITION 79	$(0, 0)$
DEFINITION 80	$(0, 0)$
DEFINITION 81	$(0, 0)$
DEFINITION 82	$(0, 0)$
DEFINITION 83	$(0, 0)$
DEFINITION 84	$(0, 0)$
DEFINITION 85	$(0, 0)$
DEFINITION 86	$(0, 0)$
DEFINITION 87	$(0, 0)$
DEFINITION 88	$(0, 0)$
DEFINITION 89	$(0, 0)$
DEFINITION 90	$(0, 0)$
DEFINITION 91	$(0, 0)$
DEFINITION 92	$(0, 0)$
DEFINITION 93	$(0, 0)$
DEFINITION 94	$(0, 0)$
DEFINITION 95	$(0, 0)$
DEFINITION 96	$(0, 0)$
DEFINITION 97	$(0, 0)$
DEFINITION 98	$(0, 0)$
DEFINITION 99	$(0, 0)$
DEFINITION 100	$(0, 0)$

[illegible]

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS.

TABLE 6  
126.3N, 127.8E

[illegible]

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

MAY, 1963

TABLE 8  
(4.65, 81.3W)

HOUR		DAY																							
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED	80	90	92	93	94	92	28	22	29	76	82	95	95	98	94	90	100	92	99	94	90	50	94	99
	CNT	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	
	UQ	101	67	70	61	66	35	31	53	74	84	88	90	95	98	101	106	106	102	100	97	93	35	136	134
	LQ	85	55	50	48	30	20	50	56	74	78	80	80	82	87	92	95	94	90	90	82	65	83	87	
f6F2	MED	342	380	375	355	350	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330
	CNT	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	UQ	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	
	LQ	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	
f6F	MED	205	215	235	215	215	538	370	340	202	200	200	190	200	195	200	190	200	215	250	272	390	375	250	220
	CNT	30	30	30	30	30	28	21	20	28	27	29	20	27	26	25	27	26	35	21	26	30	27	25	29
	UQ	210	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	
	LQ	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
M3000F2	MED	305	335	335	365	365	365	328	350	295	295	295	332	335	332	285	285	275	275	275	275	275	275	275	275
	CNT	31	37	30	32	34	32	17	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	
	UQ	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	
	LQ	320	300	320	340	332	310	280	320	290	255	230	230	220	225	225	225	225	225	225	225	225	225	225	
f6F1	MED	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	
	CNT	9	24	28	27	18	7																		
	UQ	190	260	332	330	340	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	
	LQ	220	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	
f6E	MED	11	8	6	19	20	17	30																	
	CNT																								
	UQ																								
	LQ																								
f6E	MED	11	8	6	19	20	17	30																	
	CNT																								
	UQ																								
	LQ																								

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

IL. 1963

TABLE 5

151.9N, 176.6W)

[illegible]

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

MAY 1963

TABLE 7  
(20.8N, 156.5M)

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
f6F2	MED	U	U	U	U																				
	CNT	34	55	48	40	37	36	53	54	52	70	50	37	94	97	102	110	114	113	108	106	80	59	59	56
	UO	38	58	52	47	43	44	47	66	76	84	90	97	107	111	116	124	120	123	110	92	76	66	60	
	LO	50	58	52	47	43	44	47	66	76	84	90	97	107	111	116	124	120	123	110	92	76	66	60	
	UO	50	44	43	36	32	30	38	52	57	64	73	78	88	92	97	101	106	105	101	95	72	59	56	52
f6F2	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	300	324	360	367	375	359	345	339	318	290	285	258	339	345	339	318	290	285	258	339	345	339	318	
	UO	300	324	360	367	375	359	345	339	318	290	285	258	339	345	339	318	290	285	258	339	345	339	318	
	LO	300	324	360	367	375	359	345	339	318	290	285	258	339	345	339	318	290	285	258	339	345	339	318	
	UO	300	324	360	367	375	359	345	339	318	290	285	258	339	345	339	318	290	285	258	339	345	339	318	
f6F	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	278	255	244	54	260	260	240	219	214	205	195	199	190	201	212	218	218	225	230	230	223	237	260	372
	UO	280	260	240	219	214	205	195	199	190	201	212	218	218	225	230	230	230	230	230	230	230	230	230	230
	LO	280	260	240	219	214	205	195	199	190	201	212	218	218	225	230	230	230	230	230	230	230	230	230	230
	UO	280	260	240	219	214	205	195	199	190	201	212	218	218	225	230	230	230	230	230	230	230	230	230	230
M3000F2	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	330	325	328	311	312	310	325	310	305	285	270	275	285	290	295	305	310	320	345	325	310	305	285	
	UO	330	325	328	311	312	310	325	310	305	285	270	275	285	290	295	305	310	320	345	325	310	305	285	
	LO	330	325	328	311	312	310	325	310	305	285	270	275	285	290	295	305	310	320	345	325	310	305	285	
	UO	330	325	328	311	312	310	325	310	305	285	270	275	285	290	295	305	310	320	345	325	310	305	285	
f6F1	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	300	325	460	440	420	450	455	440	440	440	440	440	450	450	450	440	420	410	400	390	380	370	360	
	UO	300	325	460	440	420	450	455	440	440	440	440	440	450	450	450	440	420	410	400	390	380	370	360	
	LO	300	325	460	440	420	450	455	440	440	440	440	440	450	450	450	440	420	410	400	390	380	370	360	
	UO	300	325	460	440	420	450	455	440	440	440	440	440	450	450	450	440	420	410	400	390	380	370	360	
f6E	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	350	350	360	310	310	350	350	360	310	310	310	310	350	350	360	310	310	310	310	310	310	310	310	
	UO	350	350	360	310	310	350	350	360	310	310	310	310	350	350	360	310	310	310	310	310	310	310	310	
	LO	350	350	360	310	310	350	350	360	310	310	310	310	350	350	360	310	310	310	310	310	310	310	310	
	UO	350	350	360	310	310	350	350	360	310	310	310	310	350	350	360	310	310	310	310	310	310	310	310	
f6E	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	105	105	103	103	103	103	103	103	103	103	103	103	103	103	105	105	106	115	115	115	115	115	115	
	UO	105	105	103	103	103	103	103	103	103	103	103	103	103	103	105	105	106	115	115	115	115	115	115	
	LO	105	105	103	103	103	103	103	103	103	103	103	103	103	103	105	105	106	115	115	115	115	115	115	
	UO	105	105	103	103	103	103	103	103	103	103	103	103	103	103	105	105	106	115	115	115	115	115	115	
f6Ea	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	31	29	24	25	23	22	21	34	43	40	47	45	43	42	39	37	38	38	40	38	32	30	36	30
	UO	31	31	28	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	LO	31	31	28	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	UO	31	31	28	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 0.25 MC TO 20.0 MC IN 27 SECONDS.

MAY, 1963





Time 11:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>0</sub> F2	MED CNT UO LO																							
f <sub>0</sub> F2	MED CNT UO LO																							
f <sub>0</sub> F	MED CNT UO LO																							
M3000F2	MED CNT UO LO																							
f <sub>0</sub> F1	MED CNT																							
f <sub>0</sub> E	MED CNT																							
f <sub>0</sub> E	MED CNT																							
f <sub>0</sub> Ea	MED CNT																							

SWEEP 0.33 MC TO 16.0 MC IN 3 MINUTES.

OCTOBER 1962

Time 11:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>0</sub> F2	MED CNT UO LO																							
f <sub>0</sub> F2	MED CNT UO LO																							
f <sub>0</sub> F	MED CNT UO LO																							
M3000F2	MED CNT UO LO																							
f <sub>0</sub> F1	MED CNT																							
f <sub>0</sub> E	MED CNT																							
f <sub>0</sub> E	MED CNT																							
f <sub>0</sub> Ea	MED CNT																							

SWEEP 0.33 MC TO 16.0 MC IN 3 MINUTES.

OCTOBER 1962

TABLE 10

Time 11:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>0</sub> F2	MED CNT UO LO																							
f <sub>0</sub> F2	MED CNT UO LO																							
f <sub>0</sub> F	MED CNT UO LO																							
M3000F2	MED CNT UO LO																							
f <sub>0</sub> F1	MED CNT																							
f <sub>0</sub> E	MED CNT																							
f <sub>0</sub> E	MED CNT																							
f <sub>0</sub> Ea	MED CNT																							

SWEEP 0.33 MC TO 16.0 MC IN 3 MINUTES.

SEPTEMBER 1962

Time 11:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>0</sub> F2	MED CNT UO LO																							
f <sub>0</sub> F2	MED CNT UO LO																							
f <sub>0</sub> F	MED CNT UO LO																							
M3000F2	MED CNT UO LO																							
f <sub>0</sub> F1	MED CNT																							
f <sub>0</sub> E	MED CNT																							
f <sub>0</sub> E	MED CNT																							
f <sub>0</sub> Ea	MED CNT																							

SWEEP 0.33 MC TO 16.0 MC IN 3 MINUTES.

SEPTEMBER 1962



[illegible]

• *Staphylococcus aureus* (Staph aureus)

[illegible][illegible]

WET 1.6 " 2.4 " 3.0 " 4.0 "

[illegible]



LUNAR SECTION																								TIME			
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
16F2	MED CNT UO LO																										
16F2	MED CNT UO LO																										
16F	MED CNT UO LO																										
M3000IF2	MED CNT UO LO																										
16F	MED CNT																										
16E	MED CNT																										
16E	MED CNT																										
16EA	MED CNT																										

August 1962

LUNAR SECTION																								TIME 15:00												
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23												
16 F2	MED CNT UO LO																																			
16 F2	MED CNT UO LO																																			
16 F	MED CNT UO LO																																			
M3000IF2	MED CNT UO LO																																			
16 F1	MED CNT																																			
16 E	MED CNT																																			
16 E	MED CNT																																			
16 Es	MED CNT																																			

August 1962

TABLE 20

LUNAR SECTION													TIME 12:00												
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
16F2	MED CNT UO LO																								
16F2	MED CNT UO LO																								
16F	MED CNT UO LO																								
M3000IF2	MED CNT UO LO																								
16F	MED CNT																								
16E	MED CNT																								
16E	MED CNT																								
16Es	MED CNT																								

	T	T'	S	K <sup>a</sup>
(67+84)				(20+31)

[illegible]

... IN 30 SECONDS.

JULY, 1962

TABLE 4  
MILFA-SWEDEN  
(65-6N, 22-13)

[illegible]

SWEEP 0.65 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC.

JULY, 1962

TABLE 31

POPELICE, SUMMER 1947-78

[illegible]

SWEEP 0.33 MC TO 20.0 MC IN 3 MIN 15.5.

10

INDAU/HAPZ, GERMANY  
151.6N, 10.1E

[illegible]
$$C \subset C' \subset C'' \subset C''' \subset C^{(4)} \subset C^{(5)} \subset C^{(6)} \subset C^{(7)} \subset C^{(8)} \subset C^{(9)} \subset C^{(10)}$$

RILEY, 1962





TIME 135-00

DATE 07 JUL 62

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M13000IF2	MED CNT UQ LQ																							
16F1	MED CNT UQ LQ																							
16E	MED CNT UQ LQ																							
16E	MED CNT UQ LQ																							
16Es	MED CNT UQ LQ																							

TIME 135-00

DATE 07 JUL 62

TIME 135-00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M13000IF2	MED CNT UQ LQ																							
16F1	MED CNT UQ LQ																							
16E	MED CNT UQ LQ																							
16E	MED CNT UQ LQ																							
16Es	MED CNT UQ LQ																							

TIME 135-00

DATE 07 JUL 62

TIME 150-00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M13000IF2	MED CNT UQ LQ																							
16F1	MED CNT UQ LQ																							
16E	MED CNT UQ LQ																							
16E	MED CNT UQ LQ																							
16Es	MED CNT UQ LQ																							

TIME 150-00

DATE 07 JUL 62

TIME 150-00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M13000IF2	MED CNT UQ LQ																							
16F1	MED CNT UQ LQ																							
16E	MED CNT UQ LQ																							
16E	MED CNT UQ LQ																							
16Es	MED CNT UQ LQ																							

TIME 150-00

TABLE 41

JOHANNESBURG, UNION OF S. AFRICA 17h.15, 28.1E1																								TIME 30.0E			
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
16F2	MED	26	27	27	26	24	22	41	54	60	63	65	65	67	68	66	64	62	46	12	16	12	20	12			
16F1	CNT	28	28	28	27	26	26	26	28	27	27	27	27	27	28	28	28	27	26	24	20	16	12	20			
16E	LO																										
16F2	MED																										
16F1	CNT																										
16E	LO																										
16F2	MED	25	214	22	44	40	40	42	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40			
16F1	CNT																										
16E	LO																										
16F2	MED																										
16F1	CNT																										
16E	LO																										
16F2	MED																										
16F1	CNT																										
16E	LO																										

JULY, 1964

WIND: N. T. 15-K MC IN 1 MINUTE 30 SECONDS.

TABLE 42

BRISBANE, AUSTRALIA 127.55, 152.9E1												TIME 150.0E												
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
16F1	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
16E	LO																							
16F2	MED																							
16F1	CNT																							
16E	LO																							
16F2	MED	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
16F1	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
16E	LO																							
16F2	MED																							
16F1	CNT																							
16E	LO																							

JULY, 1964

WIND: N. T. 15-K MC IN 1 MINUTE 55 SECONDS.

TABLE 43

CANBERRA, AUSTRALIA																								TIME 150.0 E											
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23											
16F2	MED																																		
	CNT																																		
	LO																																		
16F2	MED																																		
	CNT																																		
	LO																																		
16F	MED																																		
	CNT																																		
	LO																																		
1630001F2	MED																																		
	CNT																																		
	LO																																		
16F1	MED																																		
	CNT																																		
	LO																																		
16E	MED																																		
	CNT																																		
	LO																																		
16E	MED																																		
	CNT																																		
	LO																																		
16E4	MED																																		
	CNT																																		
	LO																																		

JULY, 1964

WIND: N. T. 15-K MC IN 1 MINUTE 30 SECONDS.

TABLE 44

HOBART, TASMANIA												142.95, 147.2E1												TIME 150.0E			
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
f6F2	MED																										
	CNT																										
	LO																										
f6F2	MED																										
	CNT																										
	LO																										
f6F	MED																										
	CNT																										
	LO																										
M13000F2	MED																										
	CNT																										
	LO																										
f6F1	MED																										
	CNT																										
f6E	MED																										
	CNT																										
f6E	MED																										
	CNT																										
f6E4	MED																										
	CNT																										

JULY, 1964

WIND: N. T. 15-K MC IN 1 MINUTE 55 SECONDS.

*P. J. H. B.*

[illegible]
$$x^{\alpha}y^{\beta}z^{\gamma} = \sum_{\lambda \vdash n} c_{\lambda}^{\alpha\beta\gamma} p_{\lambda}, \quad c_{\lambda}^{\alpha\beta\gamma} = \frac{f_{\lambda}}{n!} \sum_{\sigma \in S_n} x^{\alpha} y^{\beta} z^{\gamma} \sigma(\lambda).$$

TABLE 4-8

[illegible]

10  
9  
8  
7  
6  
5  
4  
3  
2  
1

2

GOLDFY MAC		00	01	02	03	04	05	06	07	08	09	10	11	2	13	14	5	16	17	18	19	20	21	22	23
HOUR																									
FeF2	MED CNT LO																								
n F2	MED CNT LO																								
n F	MED CNT LO																								
M130001F2	MED CNT LO																								
FeF	MED CNT																								
FeE	MED CNT																								
n E	MED CNT																								
FeEa	MED CNT																								

100

Figure 1

[illegible]

2015. 1. 16.



HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M13000IF2	MED CNT UQ LQ																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16E8	MED CNT																							

TABLE 51

1654654\_122113

S.0000012

TIME 15:02

TABLE 51

1654654\_122113

S.0000012

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M13000IF2	MED CNT UQ LQ																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16E8	MED CNT																							

HOUR	TIME 00.00																							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6 F2	MED																							
	CNT																							
	UO																							
	LO																							
n F2	MED																							
	CNT																							
	UO																							
	LO																							
n F	MED																							
	CNT																							
	UO																							
	LO																							
M3000IF2	MED																							
	CNT																							
	UO																							
	LO																							
f6 F1	MED																							
	CNT																							
	UO																							
	LO																							
f6 E	MED																							
	CNT																							
	UO																							
	LO																							
n E	MED																							
	CNT																							
	UO																							
	LO																							
f6 E4	MED																							
	CNT																							
	UO																							
	LO																							

SWEET 1.0 MC TO 17.0 MC IN 14 SECONDS.

JUNE, 1962

TABLE 56

HOUR	TIME 00.04																							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6 F2	MED																							
	CNT																							
	UO																							
	LO																							
n F2	MED																							
	CNT																							
	UO																							
	LO																							
n F	MED																							
	CNT																							
	UO																							
	LO																							
M3000IF2	MED																							
	CNT																							
	UO																							
	LO																							
f6 F1	MED																							
	CNT																							
	UO																							
	LO																							
f6 E	MED																							
	CNT																							
	UO																							
	LO																							
n E	MED																							
	CNT																							
	UO																							
	LO																							
f6 E4	MED																							
	CNT																							
	UO																							
	LO																							

SWEET 1.0 MC TO 20.0 MC IN 3 MINUTES.

JUNE, 1962

TABLE 57

PRUHONICE • CZECH SLOVAKIA

150.0N,

TIME 0.0

[illegible]

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

-AZ, AUSTRIA

[illegible]

TIME 15.0E

[illegible]

CITIZENS' H. H. LAND

100

TIME 4.5.4.1

[illegible]
$$w \wedge v \geq \Delta \wedge \Delta', \quad \Delta, \quad \Delta'$$
[illegible]

TIME 15.500

[illegible]

TIME 21.23

| HOUR     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Is F2    | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N F2     | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N F      | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M3000IF2 | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is F1    | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is E     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is Es    | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TABLE 54

TIME 135.28

| HOUR     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Is F2    | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N F2     | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N F      | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M3000IF2 | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is F1    | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is E     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is Es    | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TABLE 55

MC IN 10 SECOND

JUNE, 1962

| HOUR     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Is F2    | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N F2     | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N F      | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M3000IF2 | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is F1    | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is E     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is Es    | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

1962

| HOUR     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Is F2    | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N F2     | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N F      | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M3000IF2 | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is F1    | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is E     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| N E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Is Es    | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TABLE 56

MC IN 10 SECOND

JUNE, 1962



TABLE 87

TRIPLET TEST DATA, CH-5A

| HOUR | 00               | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F  | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E  | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E  | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Es | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TIME 105.0E

| HOUR | 00               | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F  | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E  | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E  | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Es | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TABLE 88

| HOUR | 00               | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F  | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E  | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E  | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Es | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| HOUR | 00               | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F  | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E  | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E  | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Es | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

SWEEP 1.0 MC TO 25.0 MC IN 10 SECONDS.

TIME 150.0E

135x35, 145x0E1

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h F       | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E4      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

JUNE, 1962

SHEEP 1.0 MC TO 114.0 MC IN 1 MINUTE 55

TIME 150.0E

135x35, 145x0E1

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h F       | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E4      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

JUNE, 1962

SHEEP 1.0 MC TO 114.0 MC IN 1 MINUTE 55

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h F       | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E4      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

JUNE, 1962

SHEEP 1.0 MC TO 114.0 MC IN 1 MINUTE 55

TIME 30.0E

135x15, 18x3E1

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h F       | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| h E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E4      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

JUNE, 1962

SHEEP 1.0 MC TO 174.0 MC IN 1 MINUTE 55

TABLE 7a

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Es      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Es      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Es      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Es      | MED<br>CNT<br>UQ<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TIME 0-0

| HOUR      | 00               | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E1      | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

MAY, 1962

TABLE 6

SOLAR, 1962

| HOUR      | 00               | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E1      | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

SWEET 1.0 MC TO 10.0 MC IN 4 MINUTES.

MAY, 1962

| HOUR      | 00               | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E1      | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

MAY, 1962

MAY, 1962

| HOUR      | 00               | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E1      | MED<br>CNT       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

SWEET 1.0 MC TO 10.0 MC IN 4 MINUTES.

MAY, 1962



| HOUR      |                        | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

DATE: 11/11/2011 TIME: 13:00:00

| HOUR      |                        | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

DATE: 11/11/2011 TIME: 13:00:00

| HOUR      |                        | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

DATE: 11/11/2011 TIME: 13:00:00

| HOUR      |                        | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT<br>UQ<br>LG |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

DATE: 11/11/2011 TIME: 13:00:00

TIME 135.0E

TABLE 65

| HOUR     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2     | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F2     | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M3000IF2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6Ea     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

MAY, 1962

TABLE 68

| HOUR     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2     | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F2     | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M3000IF2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6Ea     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

SWEEP 1.0 MC TO 15.0 MC IN 1 MINUTE 30 SECONDS.

MAY, 1962

| HOUR     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2     | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F2     | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M3000IF2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6Ea     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

SWEEP 1.0 MC TO 25.0 MC IN 1 SECOND.

TABLE #9

CAPE TOWN, UNION OF S. AFRICA 13x15x 19.3x1

TIME 10.0E

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2      | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nF2       | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nF        | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nE        | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6Ea      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TABLE #9

CAPE TOWN, UNION OF S. AFRICA 13x15x 19.3x1

TIME 10.0E

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2      | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nF2       | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nF        | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nE        | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6Ea      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TABLE #9

TABLE #9

CAPE TOWN, UNION OF S. AFRICA 13x15x 172x0E1

TIME 10.0E

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2      | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nF2       | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nF        | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nE        | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6Ea      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TABLE #9

CAPE TOWN, UNION OF S. AFRICA 13x15x 172x0E1

TIME 10.0E

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| f6F2      | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nF2       | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nF        | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M13000IF2 | MED<br>CNT<br>UQ<br>LQ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| nE        | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| f6Ea      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TABLE #9

| Hour     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2     | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2     | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F      | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M30001F2 | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Ea     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| Hour     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2     | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2     | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F      | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M30001F2 | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Ea     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| Hour     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2     | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2     | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F      | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M30001F2 | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Ea     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| Hour     | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2     | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2     | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F      | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M30001F2 | MED<br>CNT<br>UG<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16Ea     | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

IN 5 MINUTES, MANUAL.

MARCH, 1960

SLEEP 2.45 MC TO 2.46 MC IN 4 MINUTES, MANUAL.

MARCH, 1960



TIDAL CURRENTS, IN KNOTS

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E4      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TIDAL CURRENTS, IN KNOTS, FOR THE MONTH OF MAY, 1964

TIDAL CURRENTS, IN KNOTS

TIDAL CURRENTS, IN KNOTS

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E4      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TIDAL CURRENTS, IN KNOTS, FOR THE MONTH OF MAY, 1964

TIDAL CURRENTS, IN KNOTS

TIDAL CURRENTS, IN KNOTS

| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E4      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TIDAL CURRENTS, IN KNOTS, FOR THE MONTH OF MAY, 1964

TIDAL CURRENTS, IN KNOTS

TABLE 59

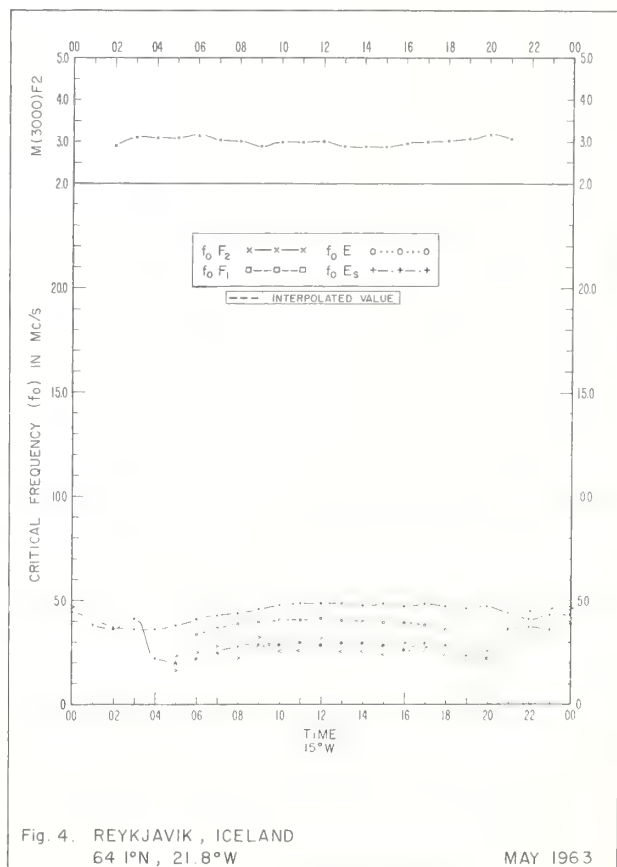
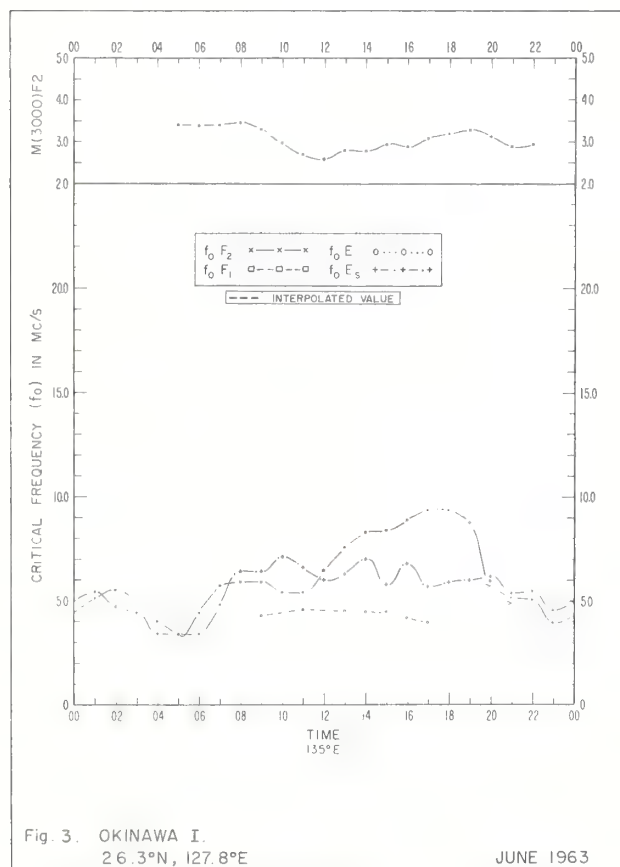
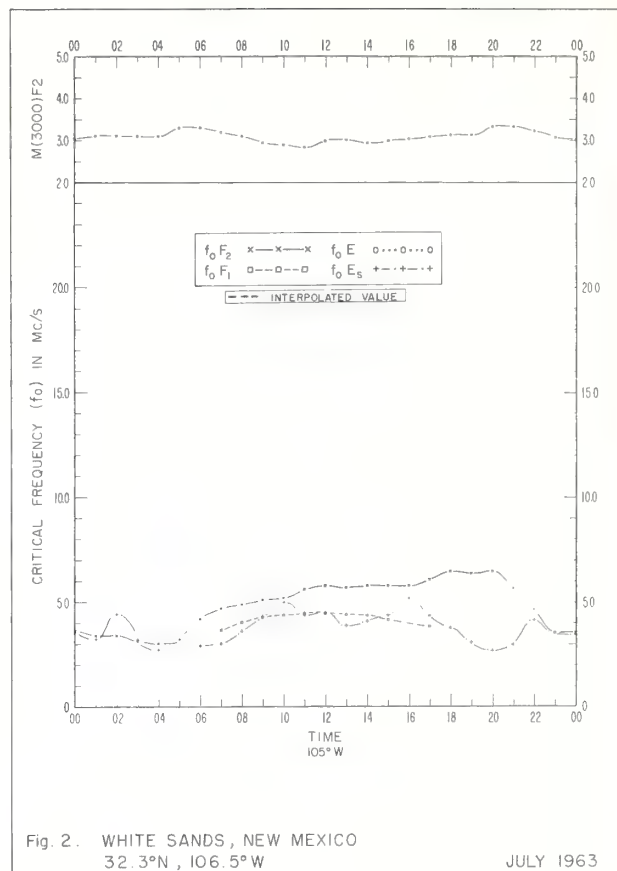
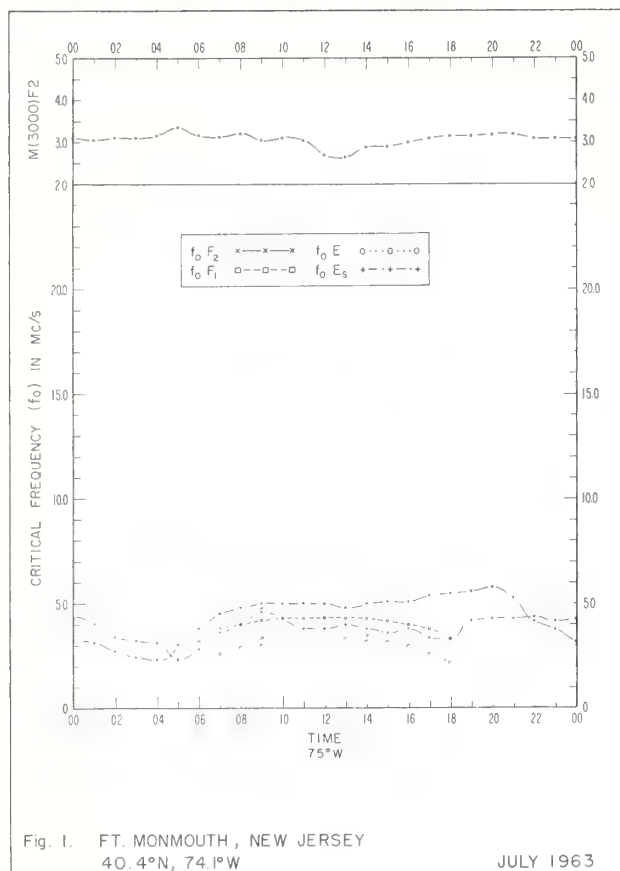
TIDAL CURRENTS, IN KNOTS

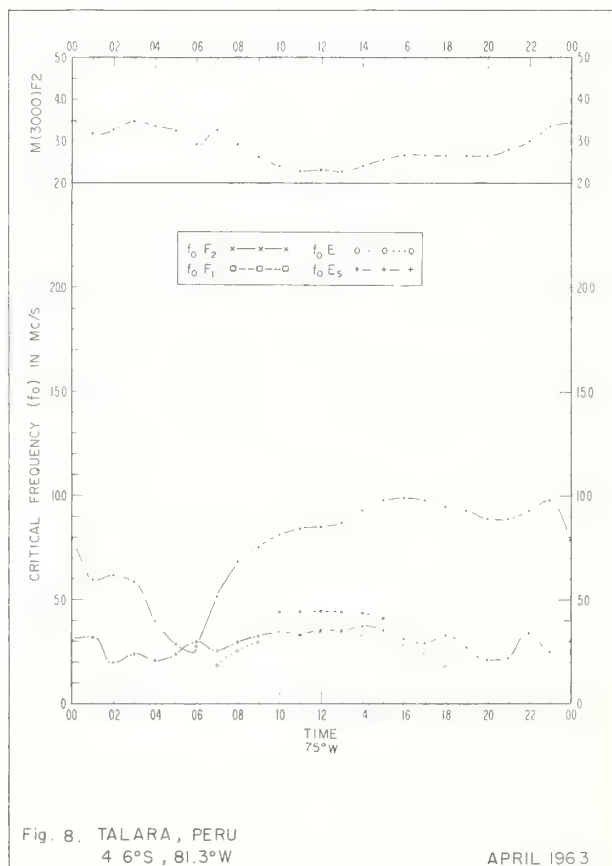
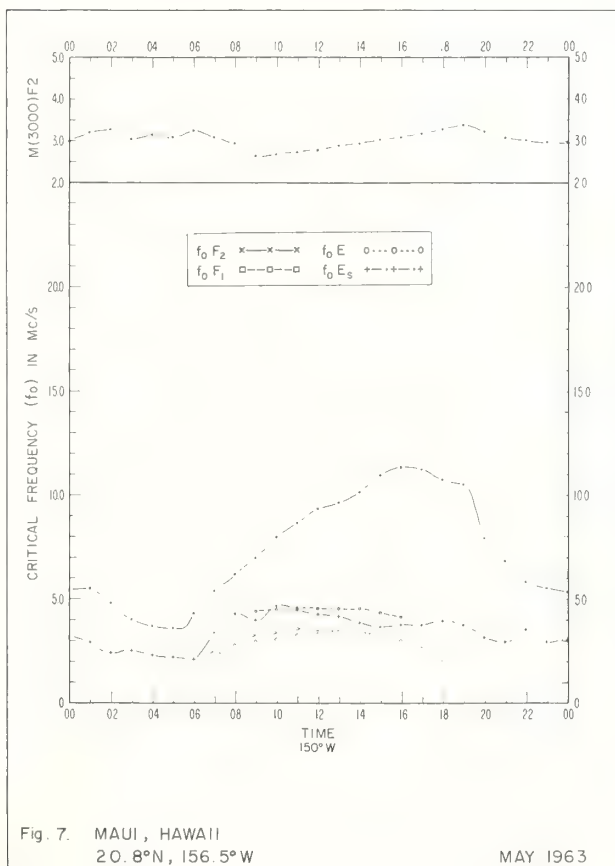
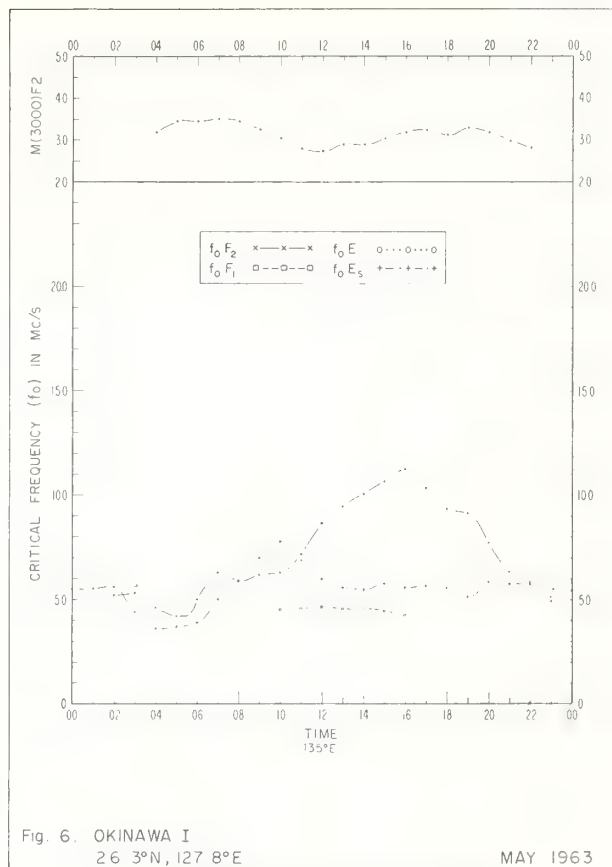
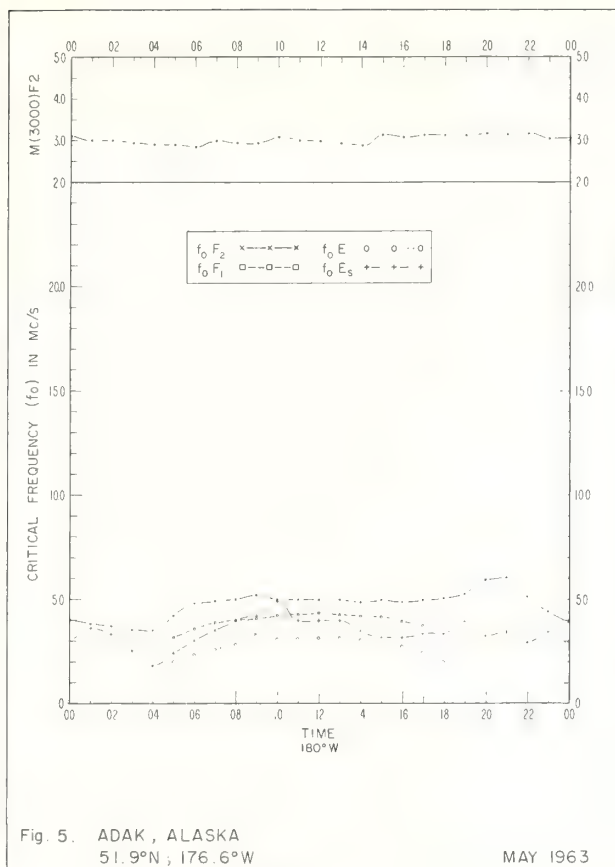
| HOUR      | 00                     | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F2      | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F       | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| M130001F2 | MED<br>CNT<br>UO<br>LO |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16F1      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E       | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 16E4      | MED<br>CNT             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

TIDAL CURRENTS, IN KNOTS, FOR THE MONTH OF MAY, 1964

TIDAL CURRENTS, IN KNOTS

TIDAL CURRENTS, IN KNOTS, FOR THE MONTH OF MAY, 1964





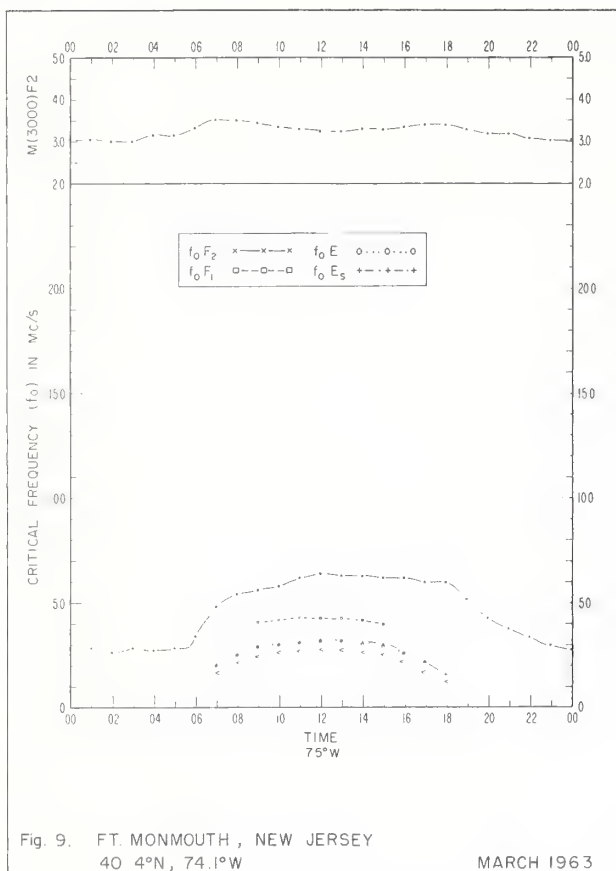


Fig. 9. FT. MONMOUTH, NEW JERSEY  
40°N, 74.1°W

MARCH 1963

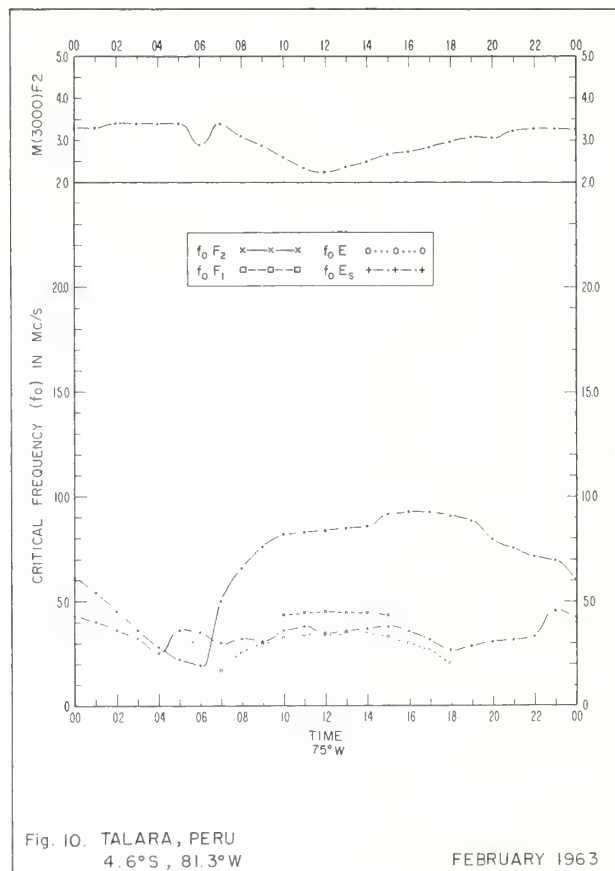


Fig. 10. TALARA, PERU  
4.6°S, 81.3°W

FEBRUARY 1963

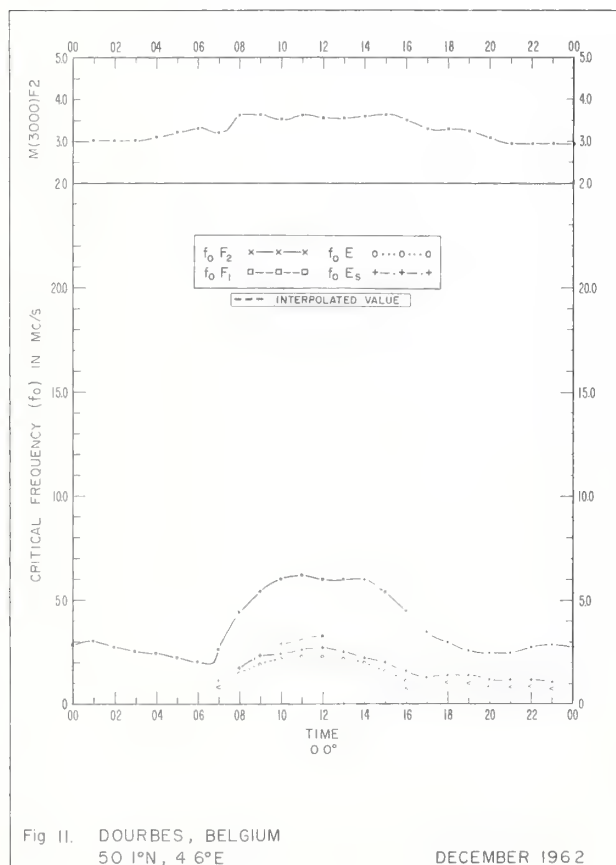


Fig. 11. DOURBES, BELGIUM  
50°N, 4°E

DECEMBER 1962

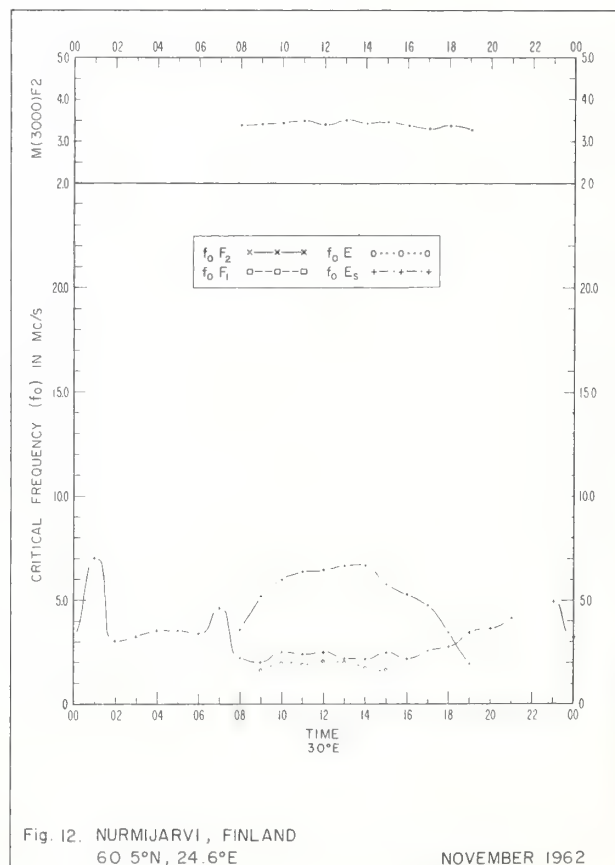


Fig. 12. NURMIJARVI, FINLAND  
60°5'N, 24.6°E

NOVEMBER 1962



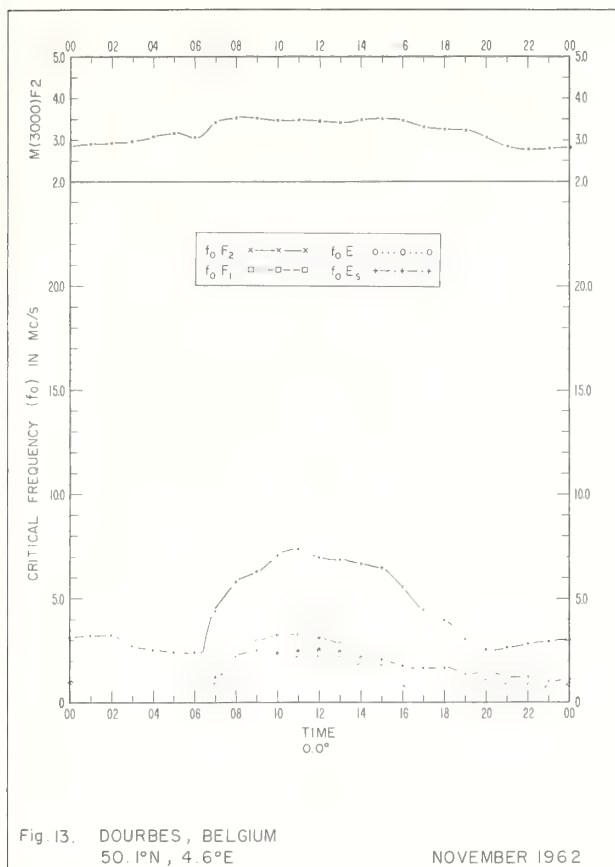


Fig. 13. DOURBES, BELGIUM  
50.1°N, 4.6°E

NOVEMBER 1962

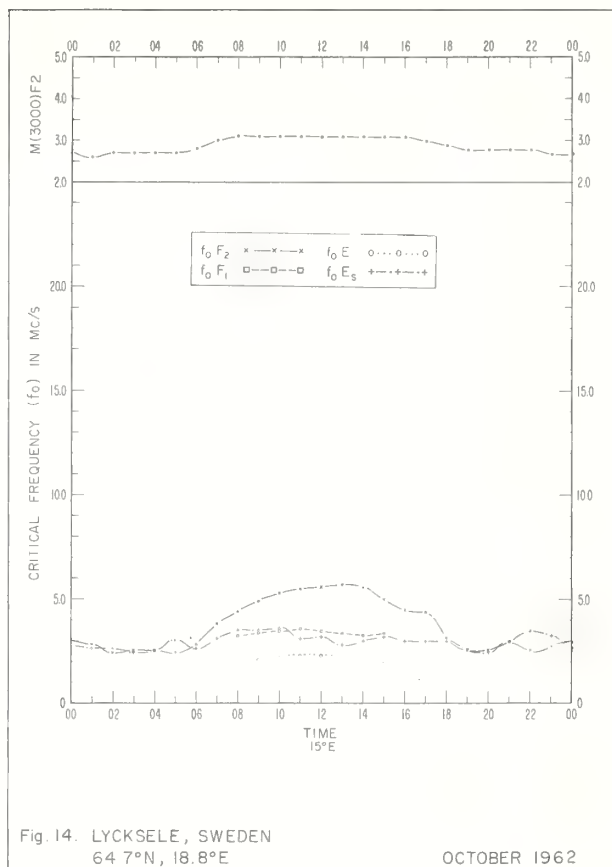


Fig. 14. LYCKSELE, SWEDEN  
64.7°N, 18.8°E

OCTOBER 1962

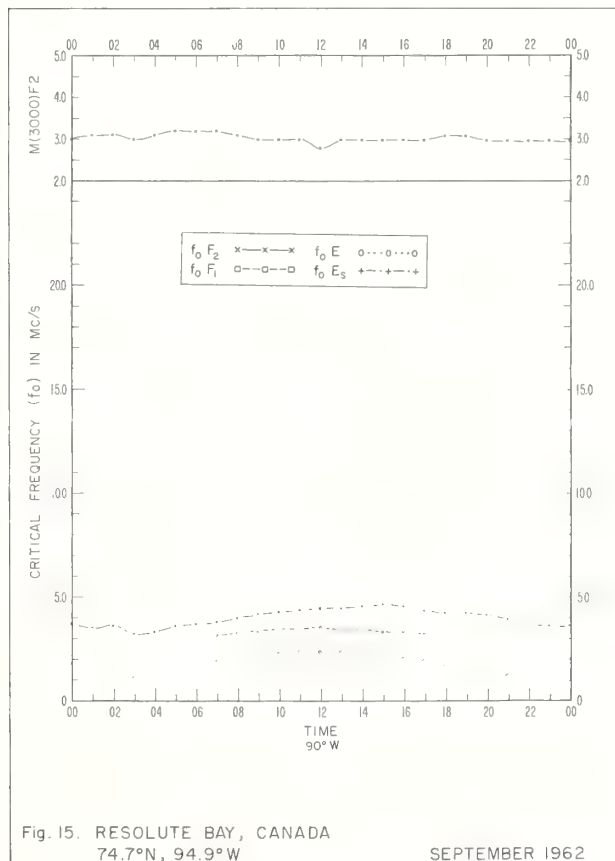


Fig. 15. RESOLUTE BAY, CANADA  
74.7°N, 94.9°W

SEPTEMBER 1962

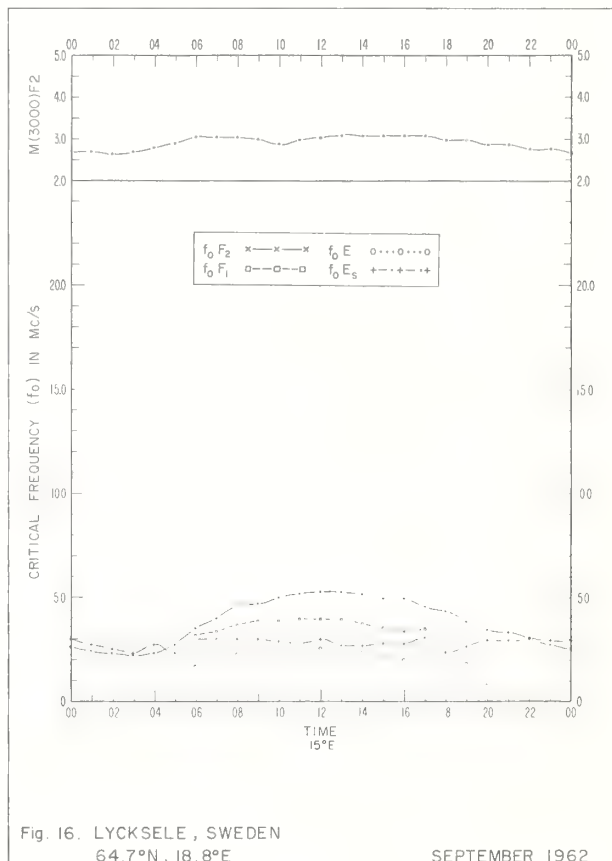


Fig. 16. LYCKSELE, SWEDEN  
64.7°N, 18.8°E

SEPTEMBER 1962

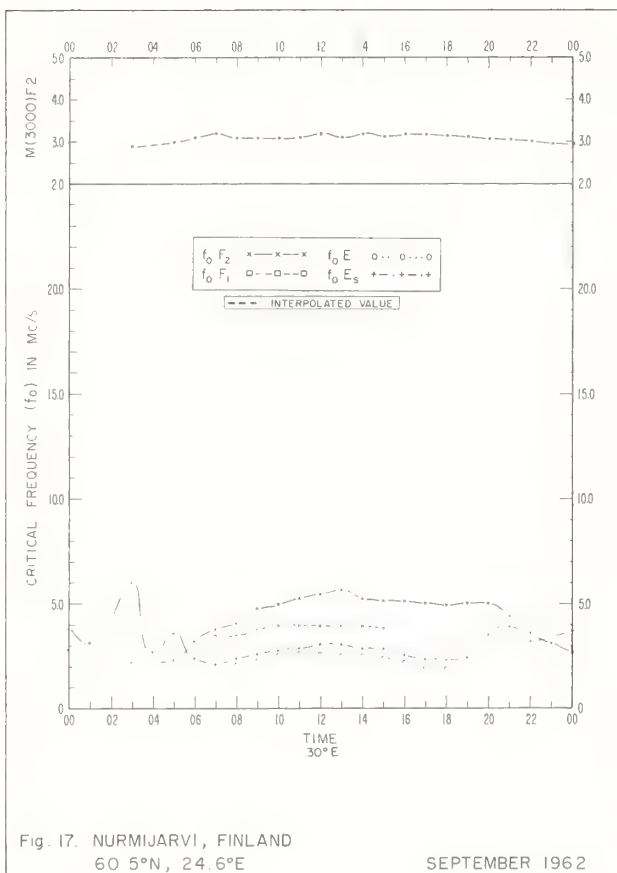


Fig. 17. NURMIJARVI, FINLAND  
60 5°N, 24.6°E

SEPTEMBER 1962

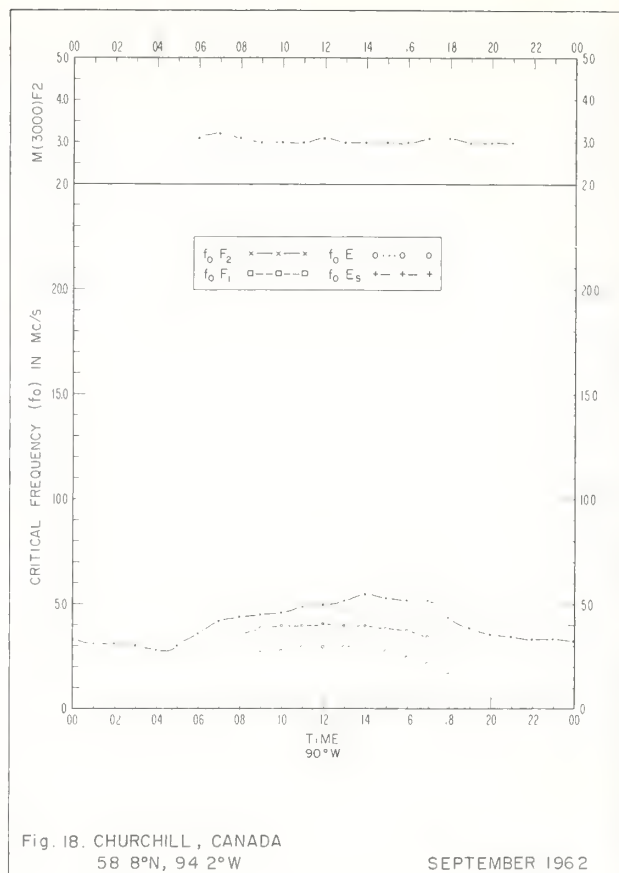


Fig. 18. CHURCHILL, CANADA  
58 8°N, 94 2°W

SEPTEMBER 1962

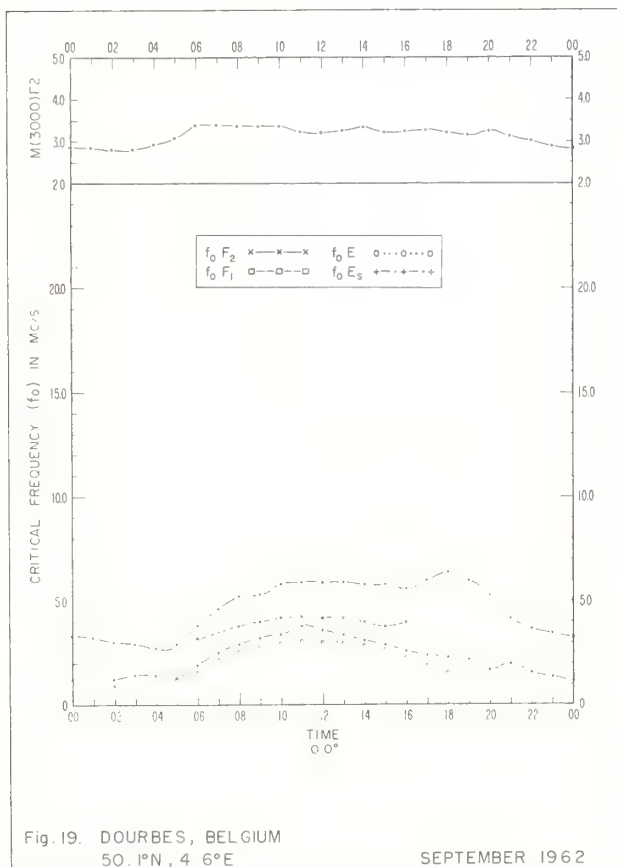


Fig. 19. DOURBES, BELGIUM  
50.1°N, 4 6°E

SEPTEMBER 1962

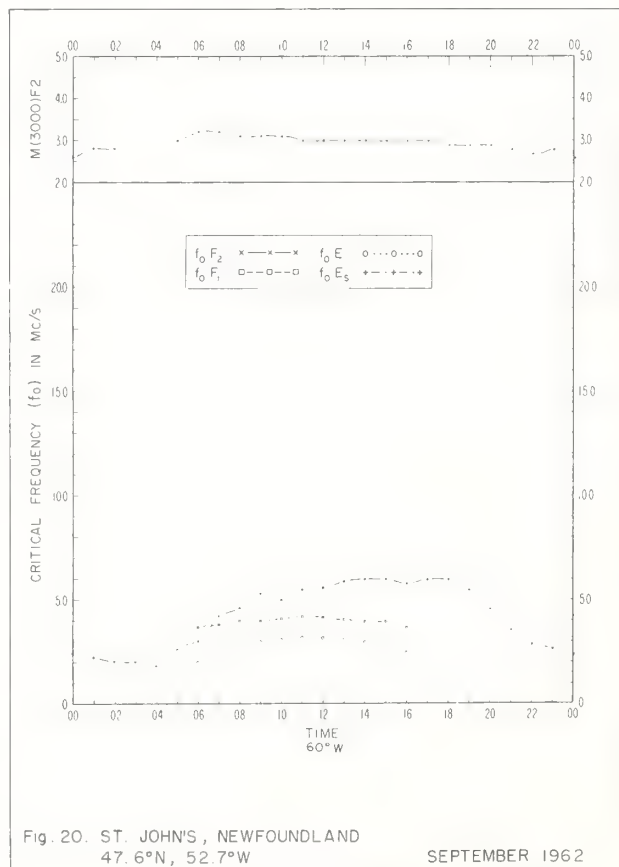


Fig. 20. ST. JOHN'S, NEWFOUNDLAND  
47.6°N, 52.7°W

SEPTEMBER 1962

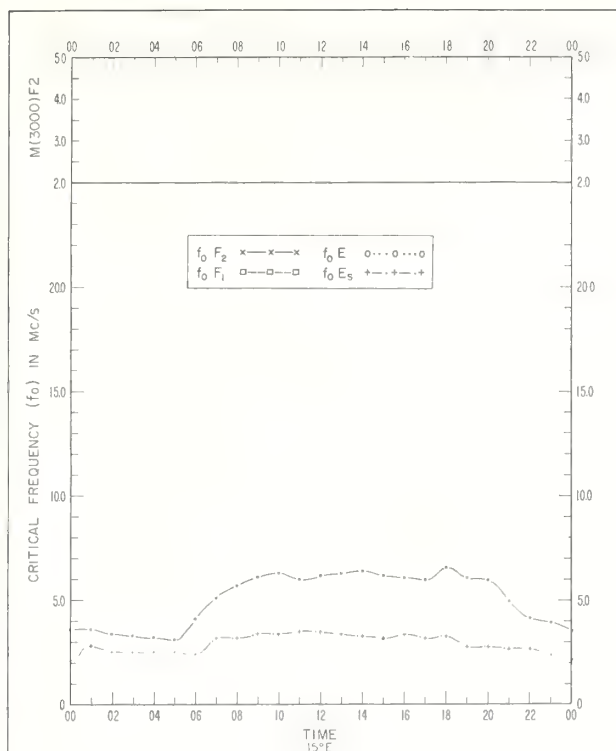


Fig. 21. GRAZ, AUSTRIA  
47.1°N, 15 5°E

SEPTEMBER 1962

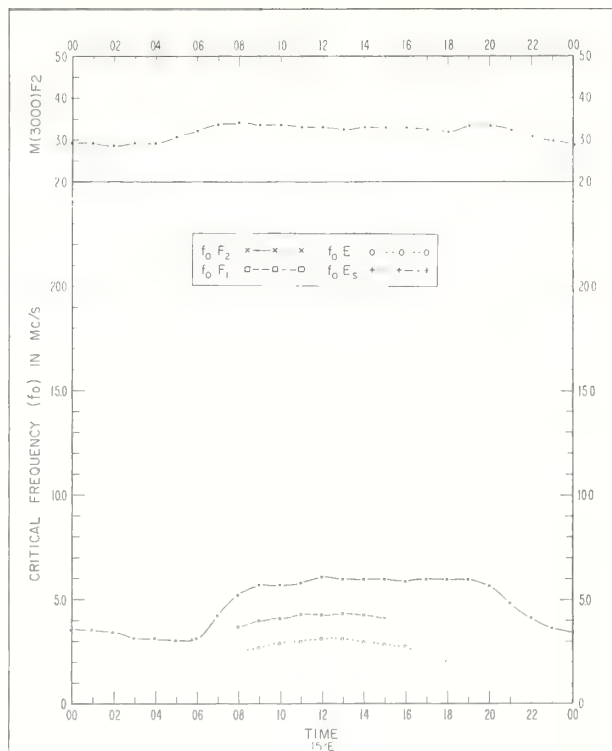


Fig. 22. SOTTENS, SWITZERLAND  
46 6°N, 6.7°E

SEPTEMBER 1962

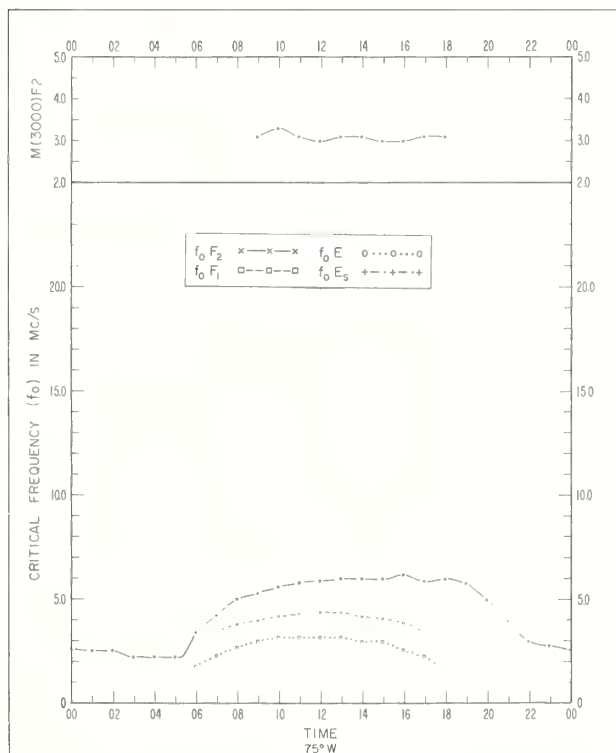


Fig. 23. OTTAWA, CANADA  
45.4°N, 75.9°W

SEPTEMBER 1962

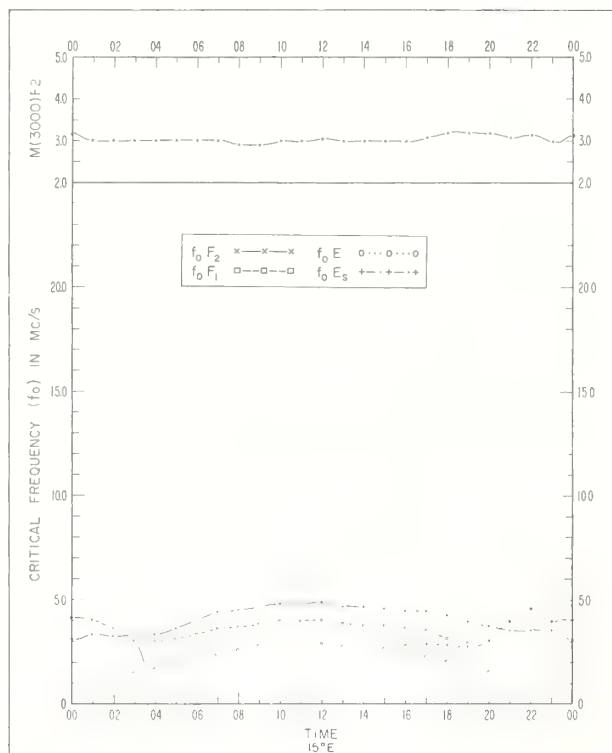
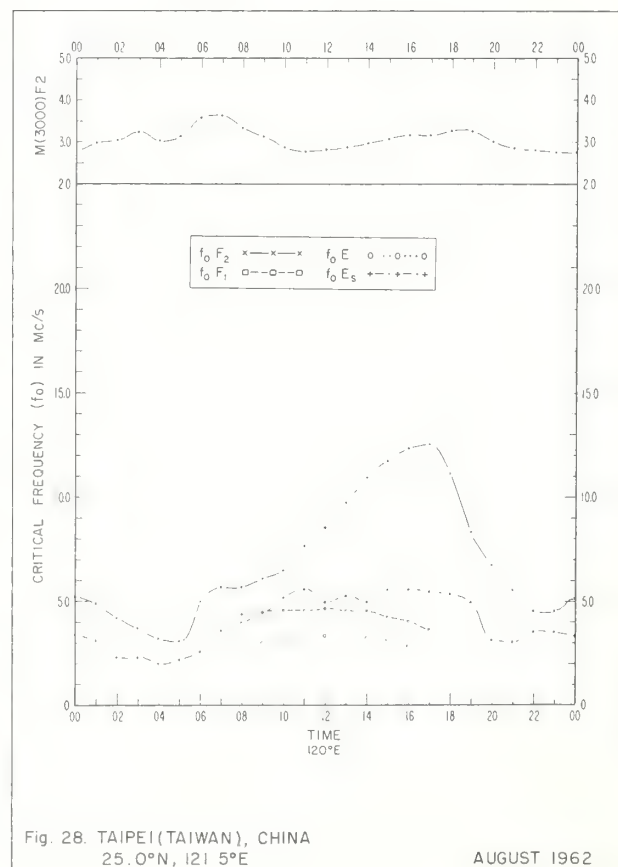
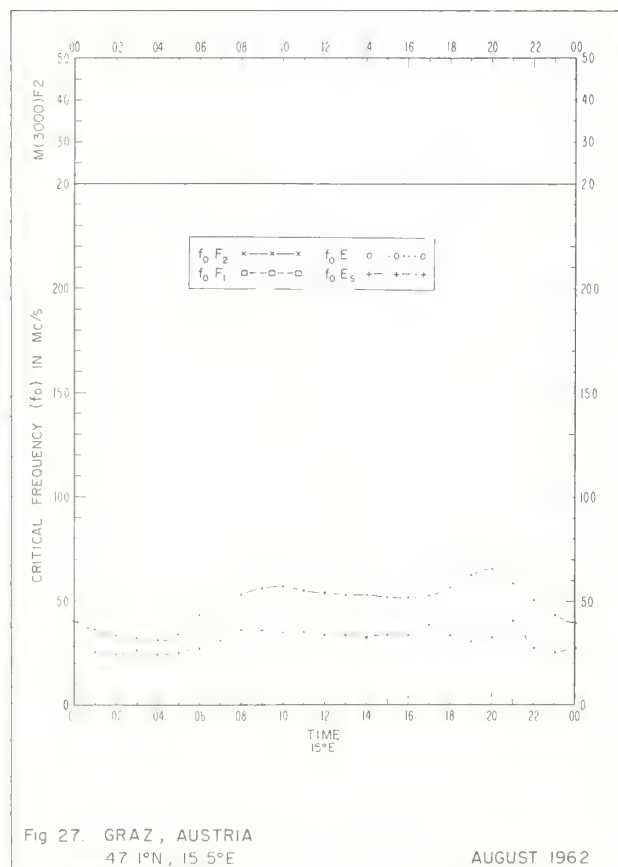
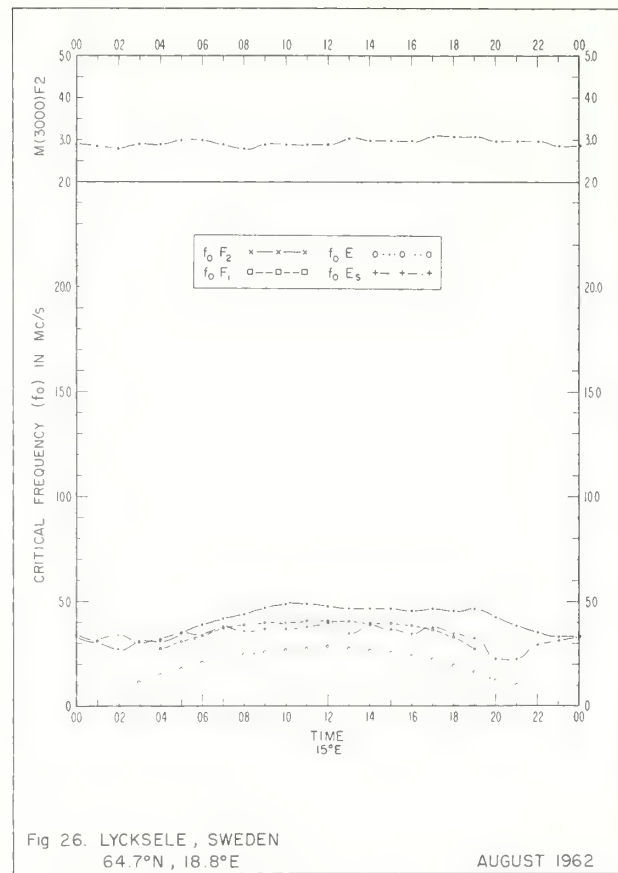
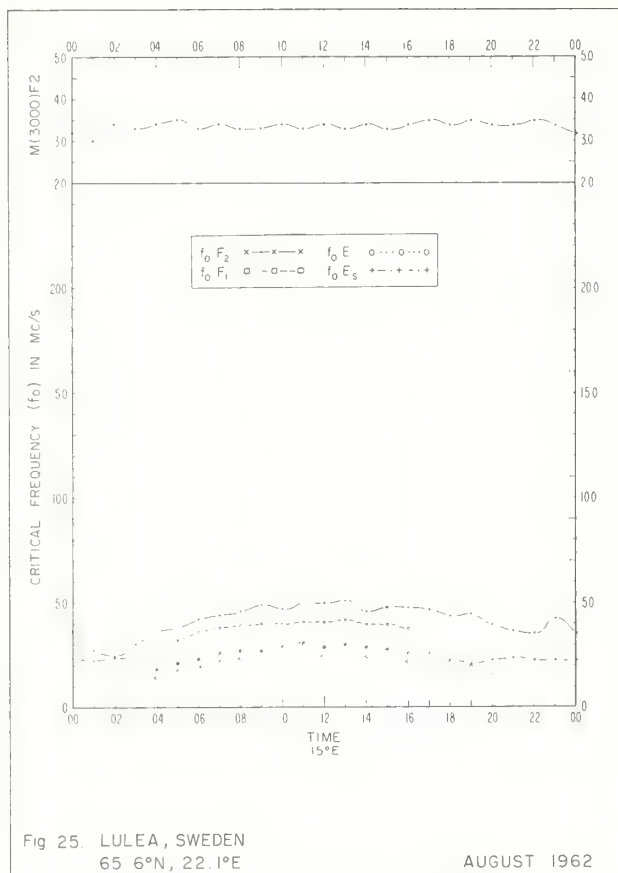
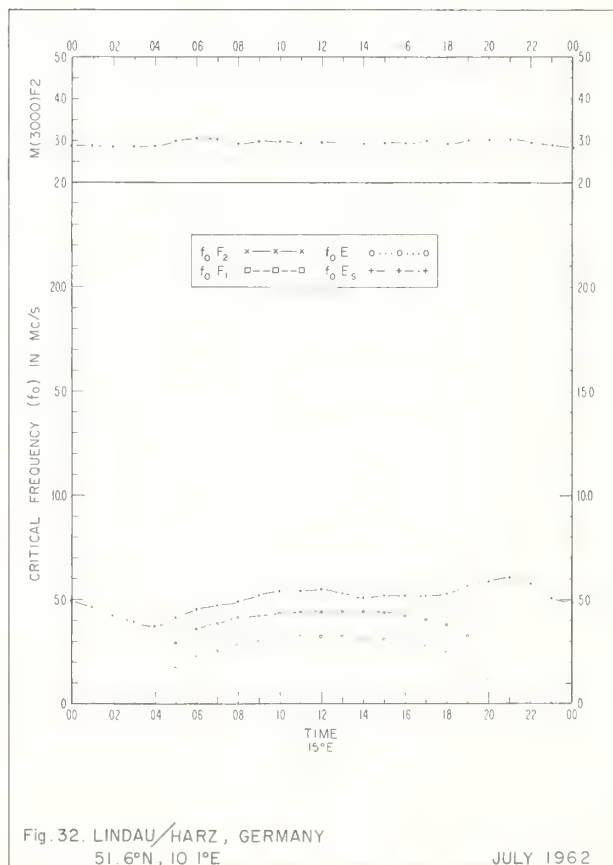
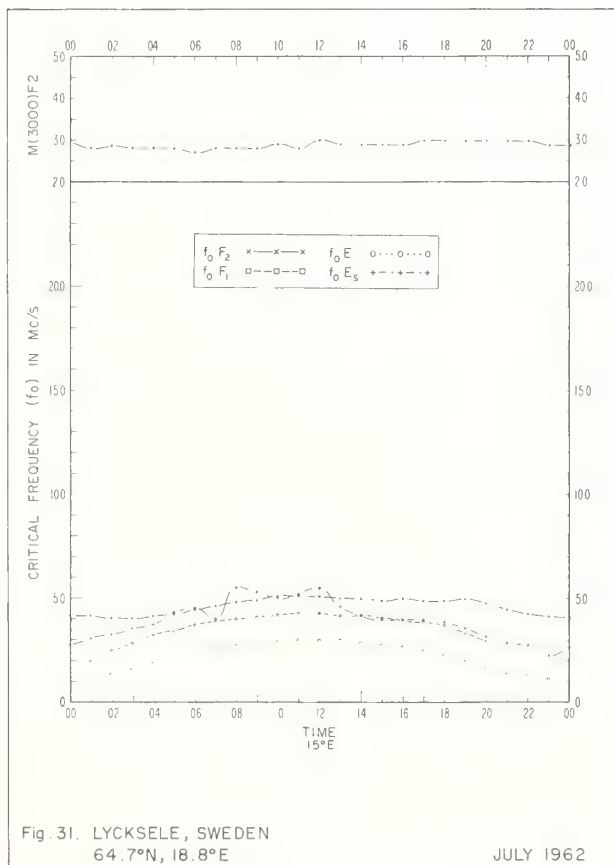
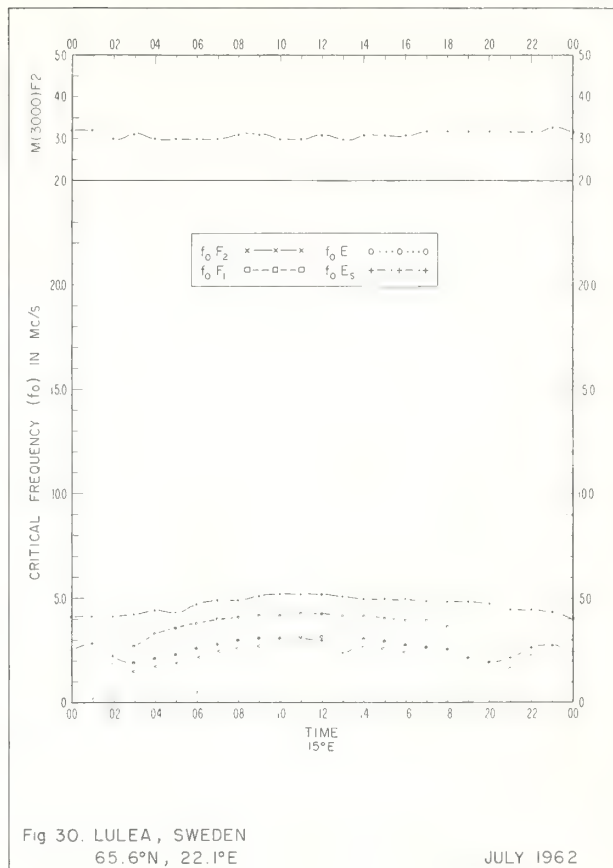
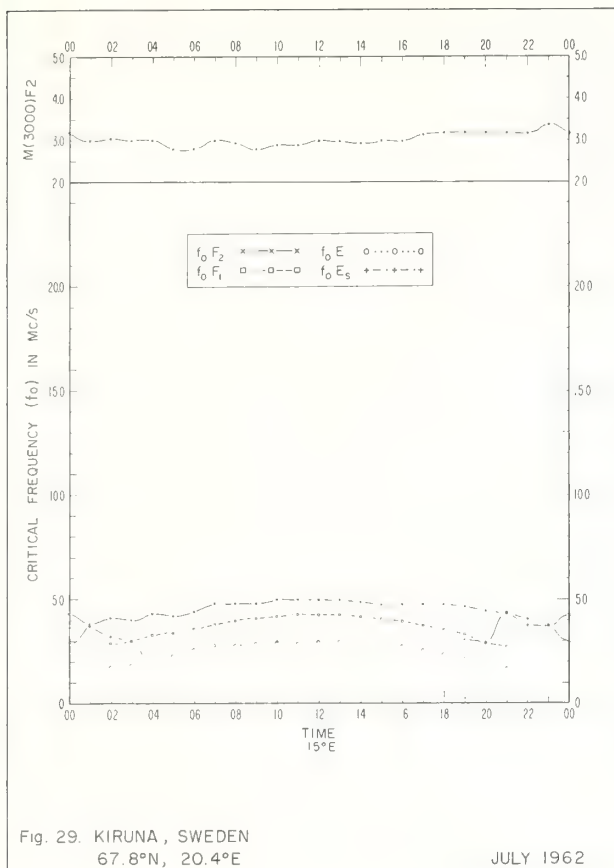


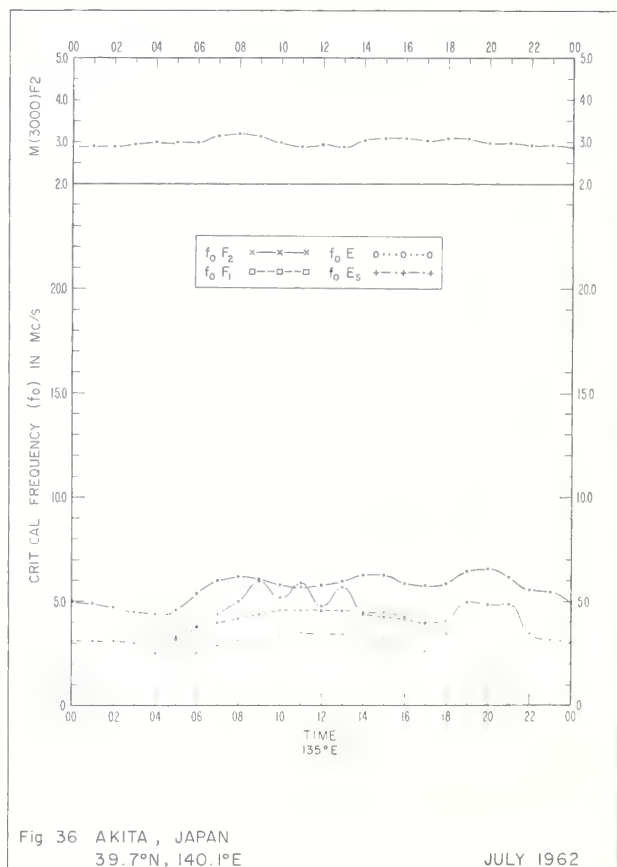
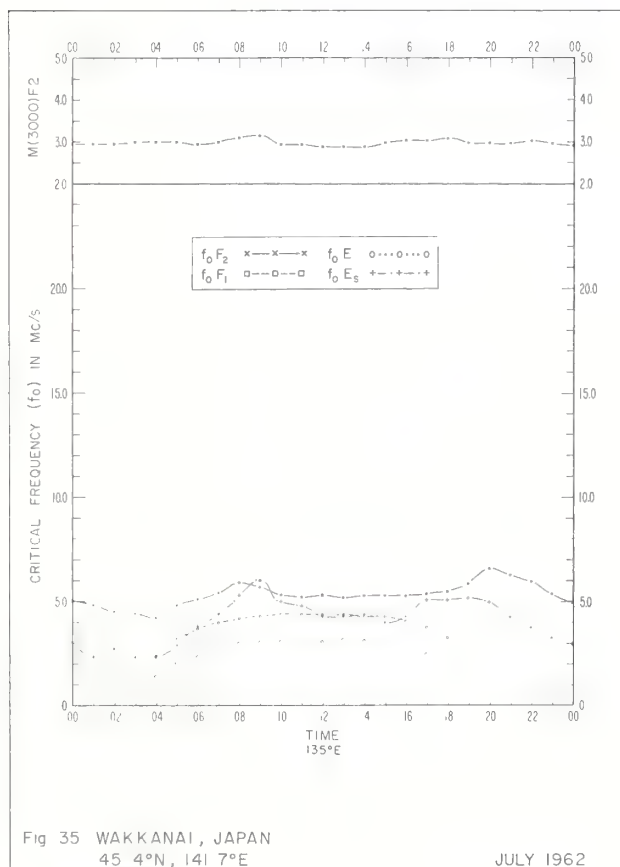
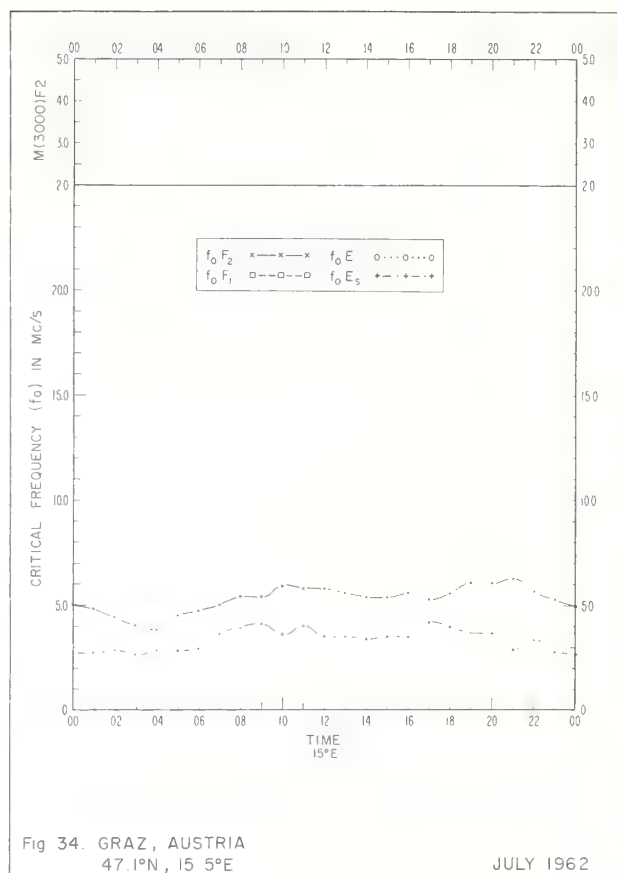
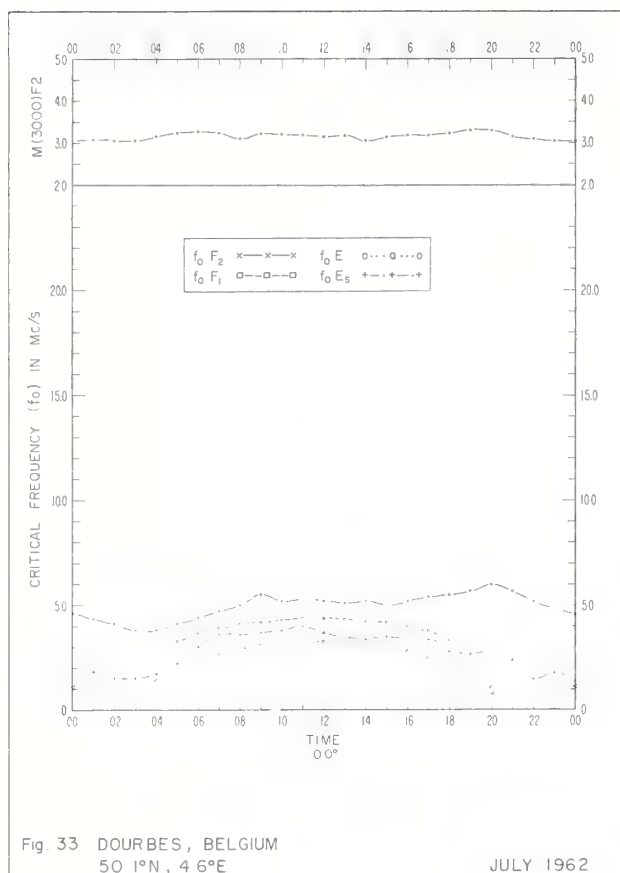
Fig. 24. KIRUNA, SWEDEN  
67 8°N, 20.4°E

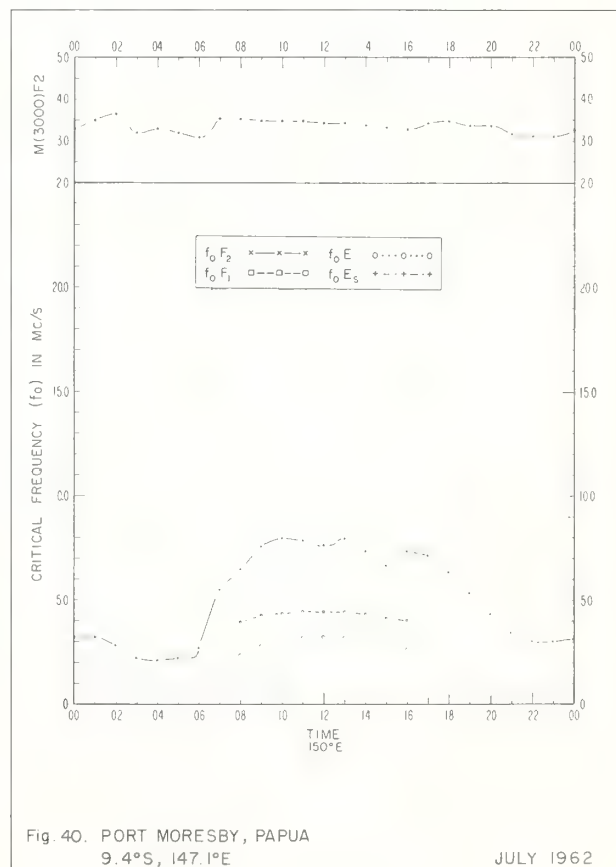
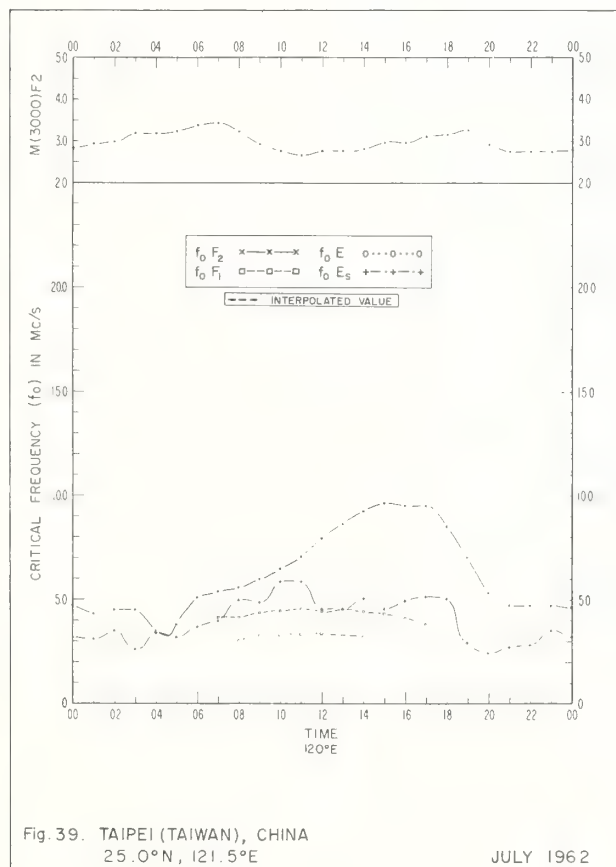
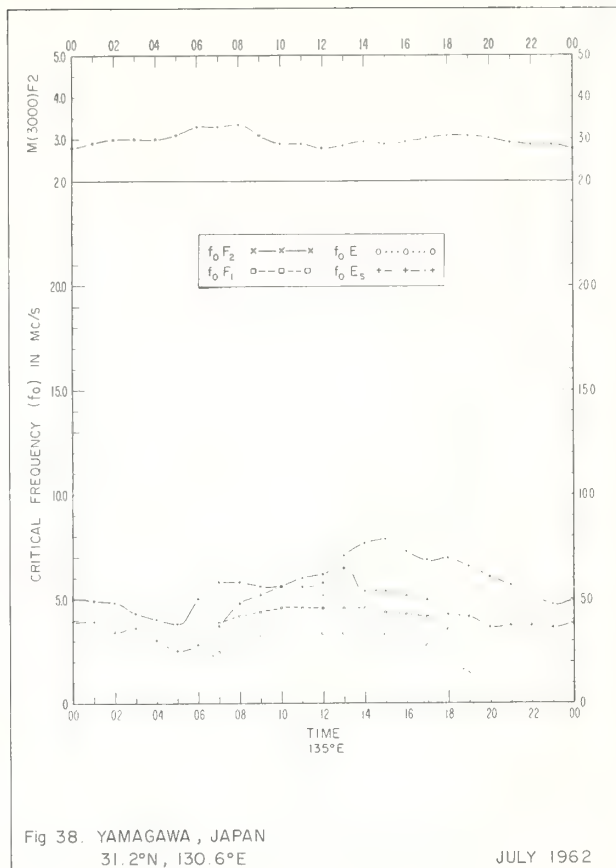
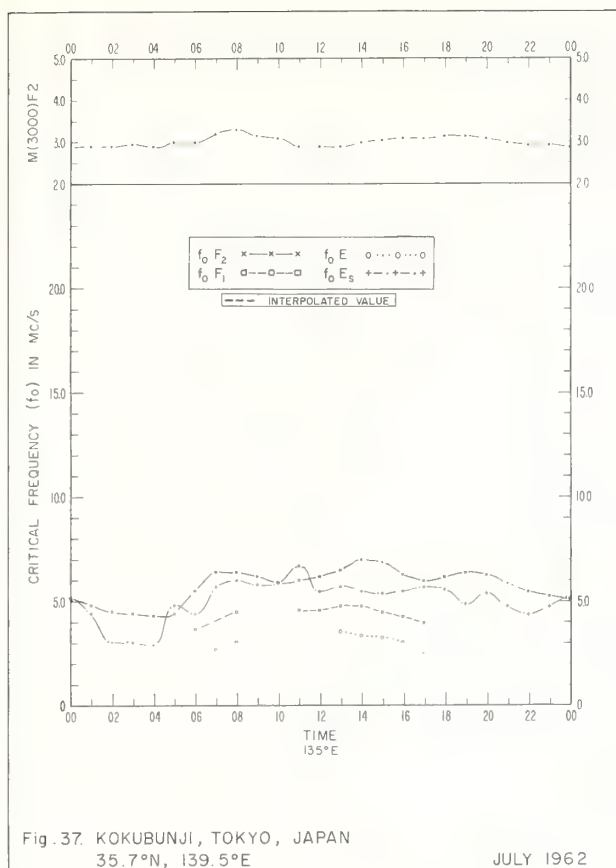
AUGUST 1962

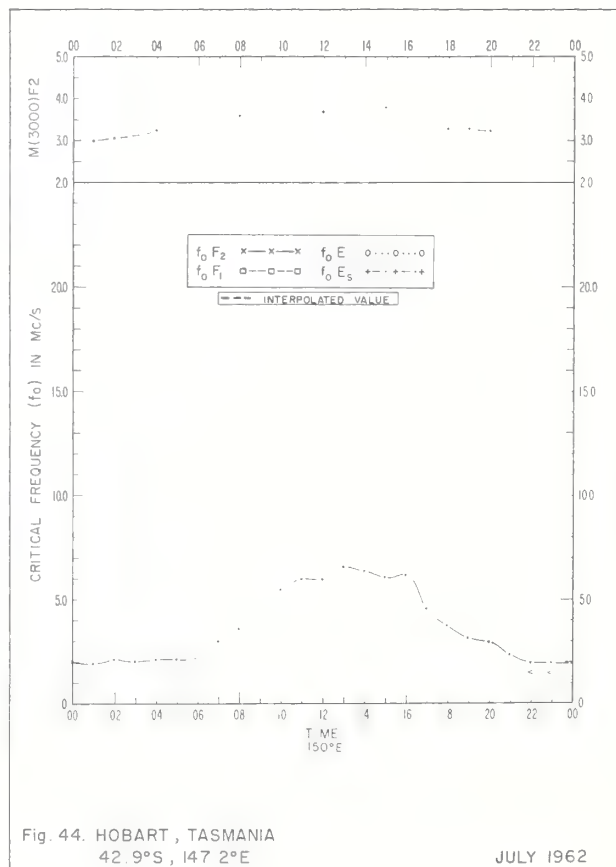
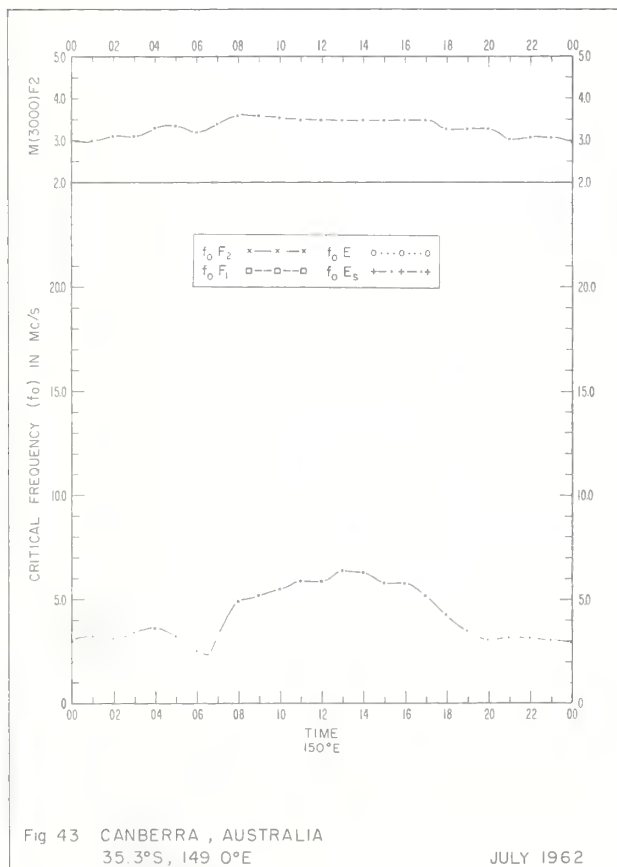
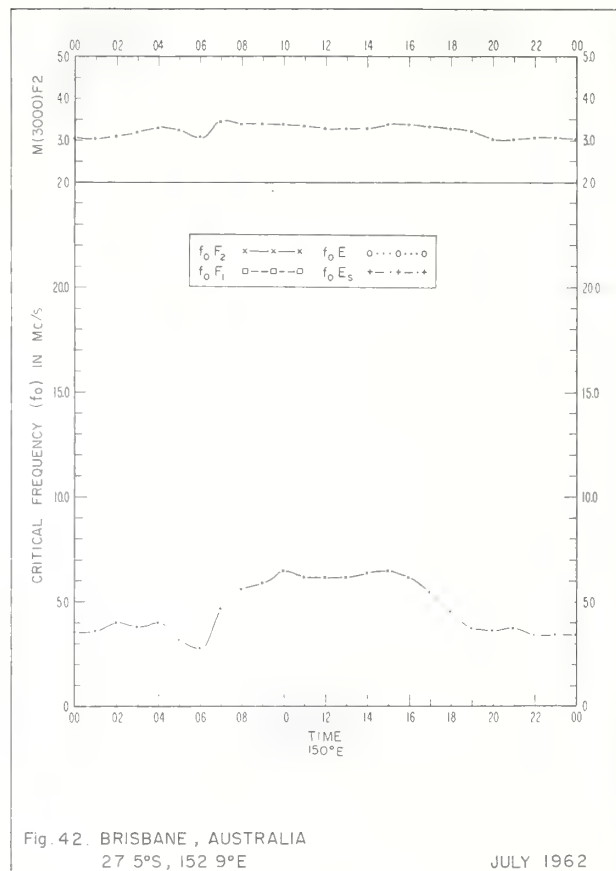
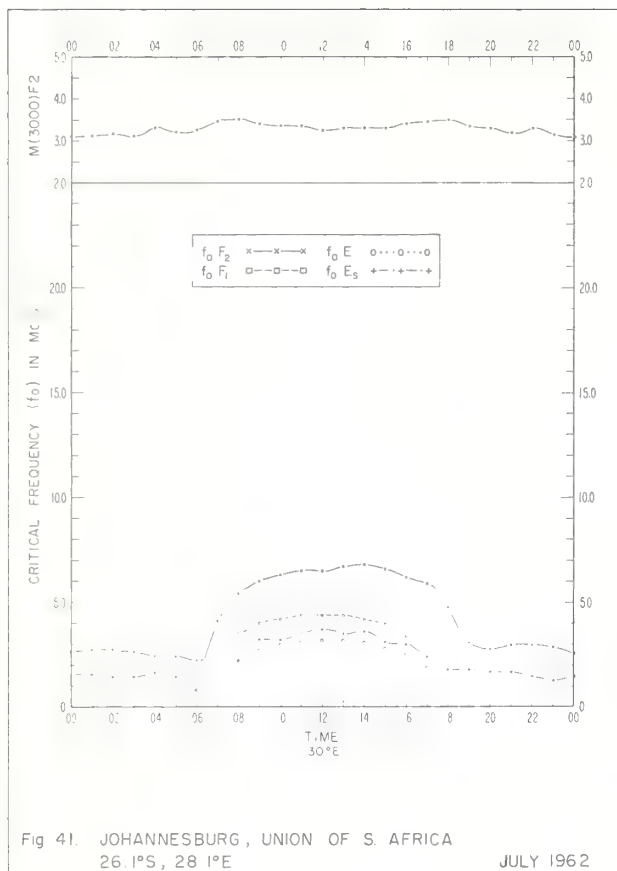














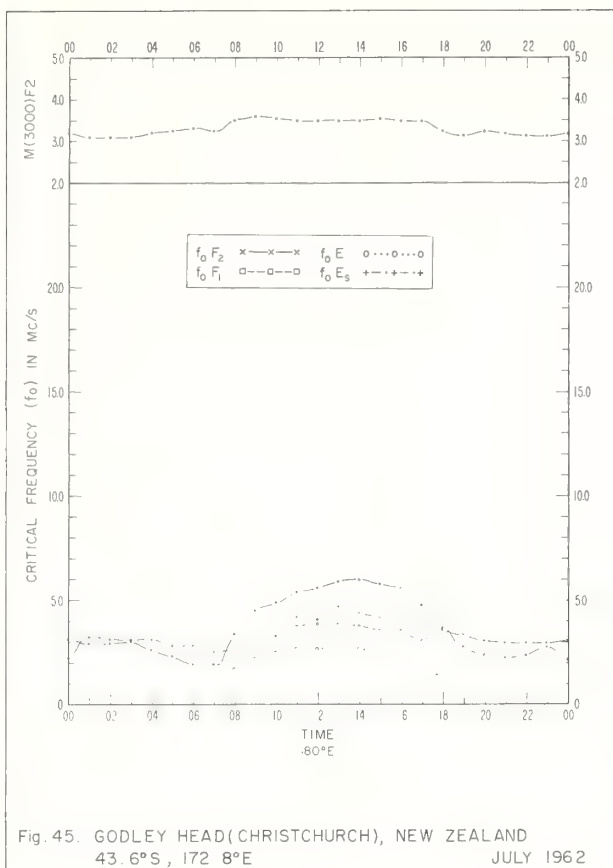


Fig. 45. GODLEY HEAD (CHRISTCHURCH), NEW ZEALAND  
43.6°S, 172.8°E  
JULY 1962

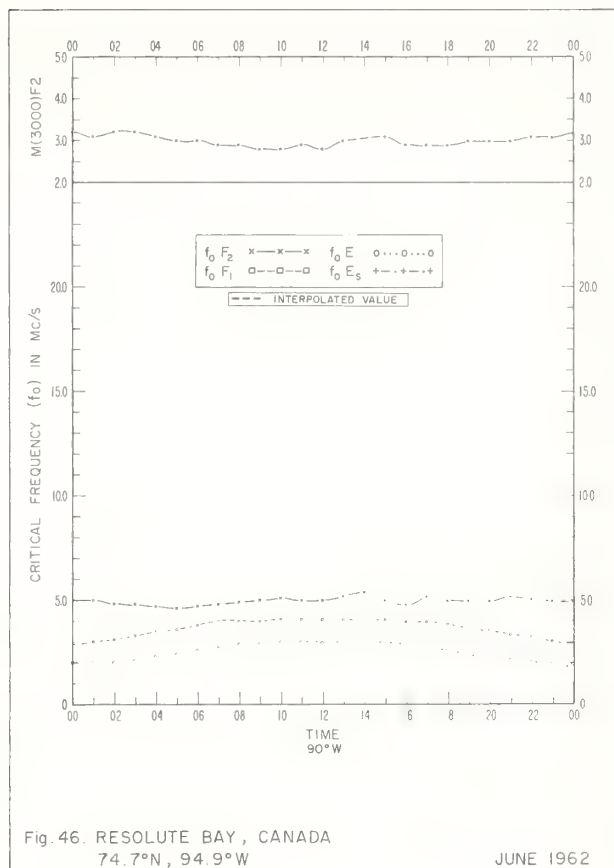


Fig. 46. RESOLUTE BAY, CANADA  
74.7°N, 94.9°W  
JUNE 1962

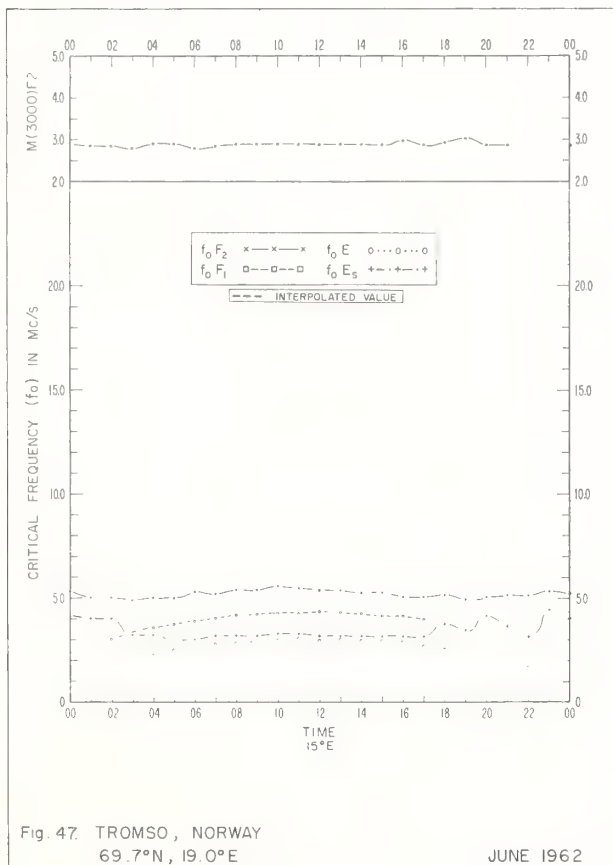


Fig. 47. TROMSØ, NORWAY  
69.7°N, 19.0°E  
JUNE 1962

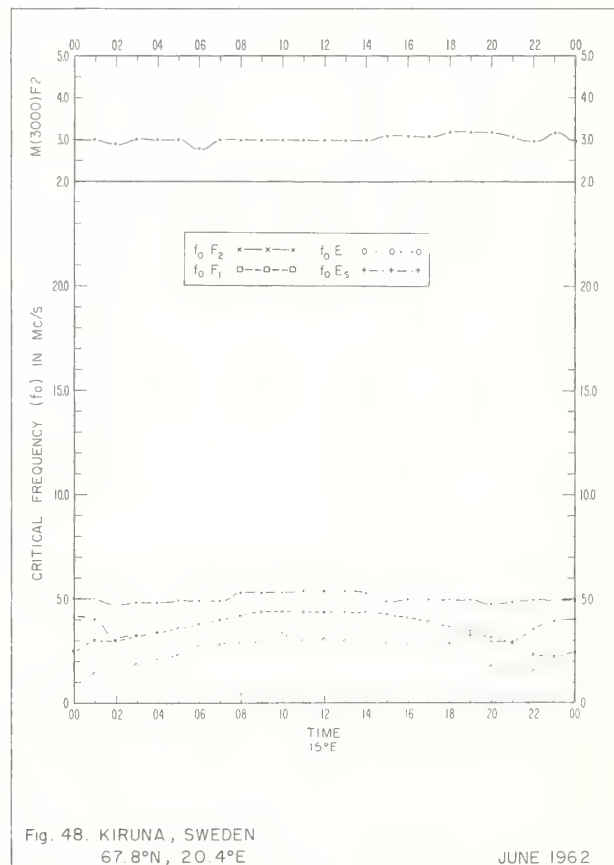
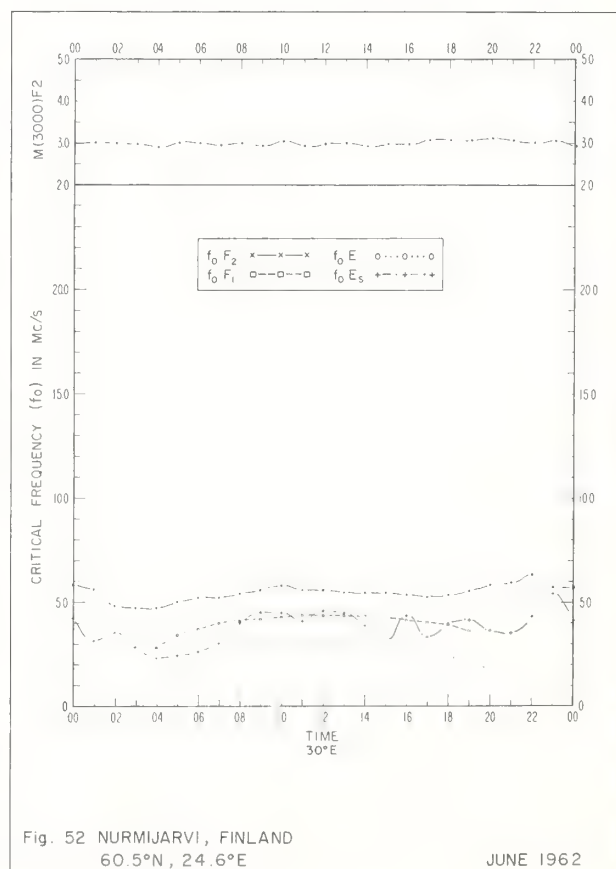
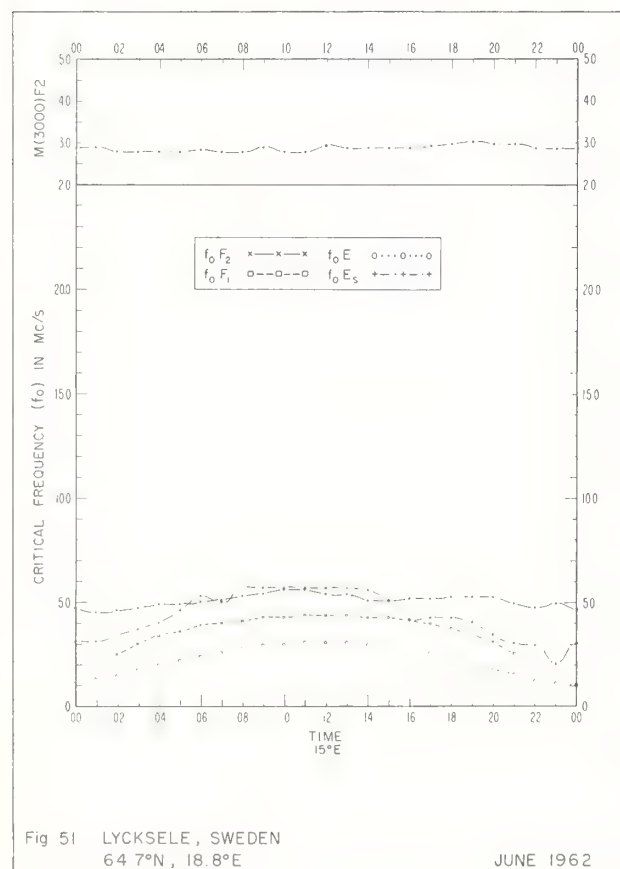
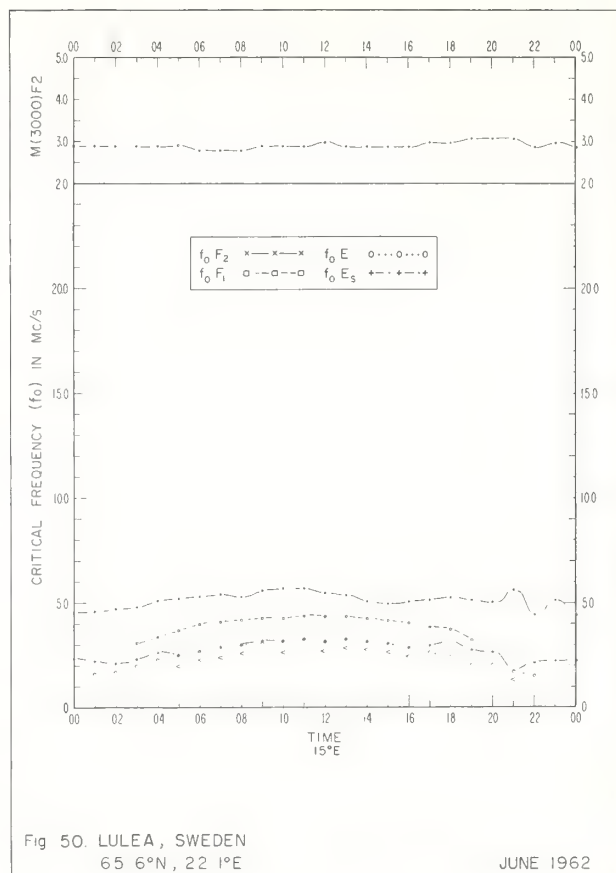
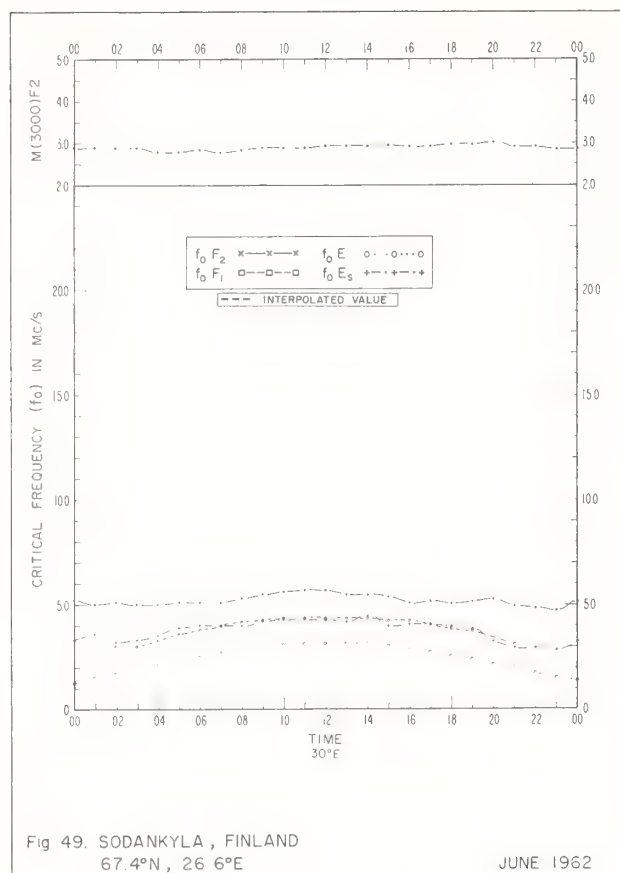
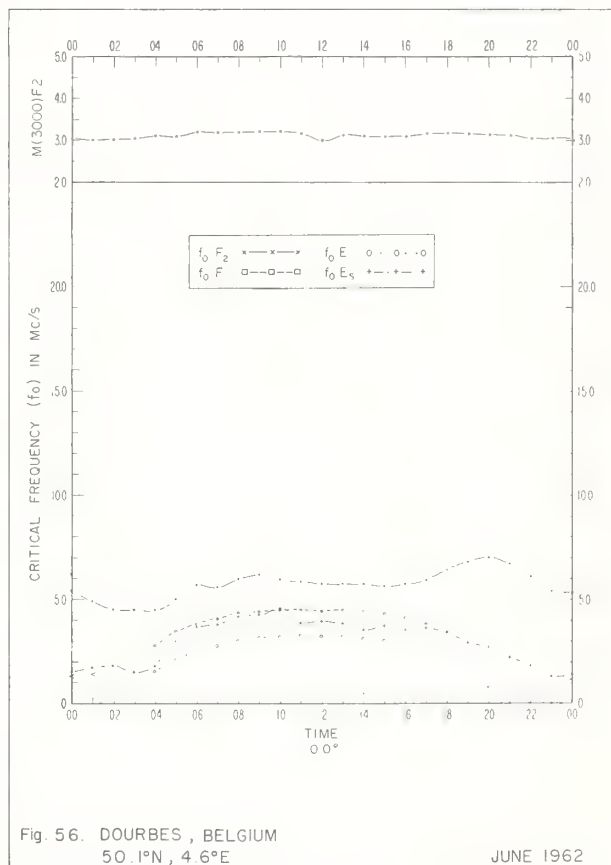
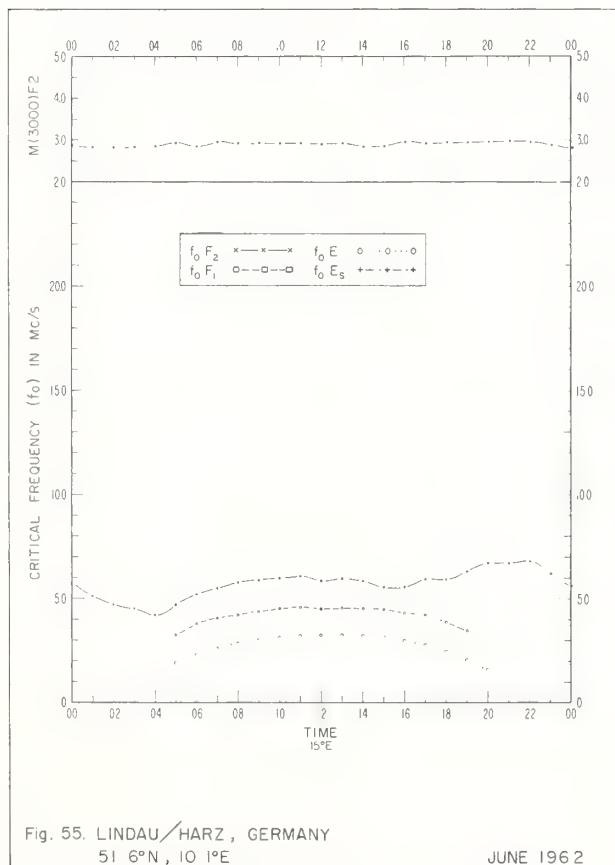
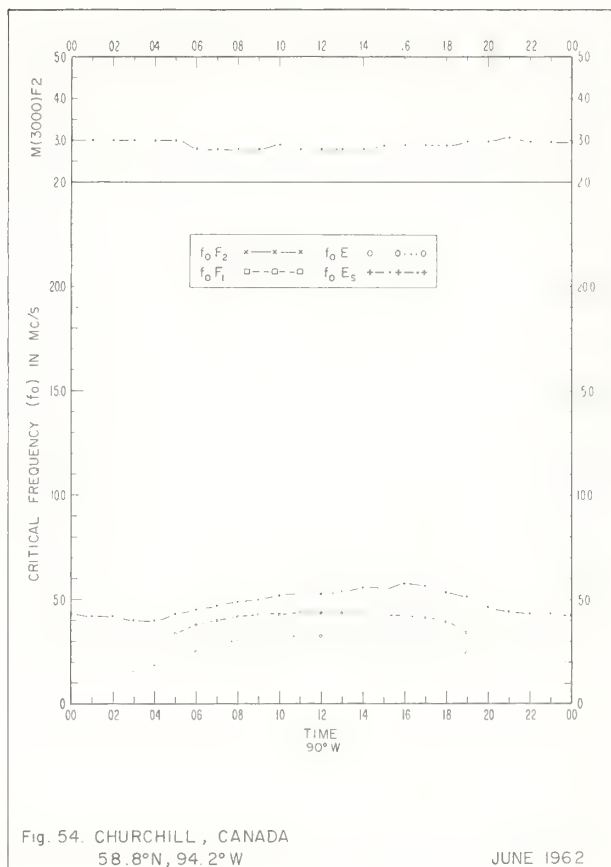
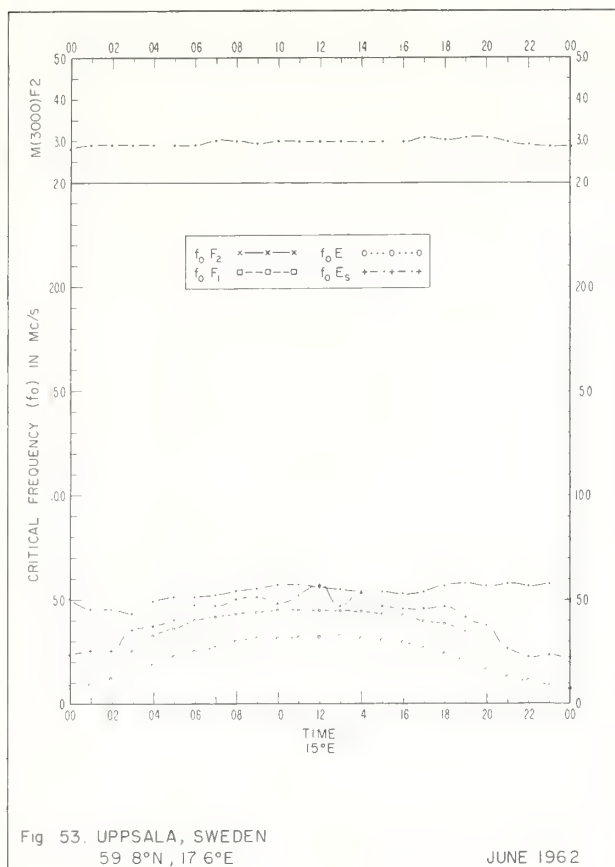
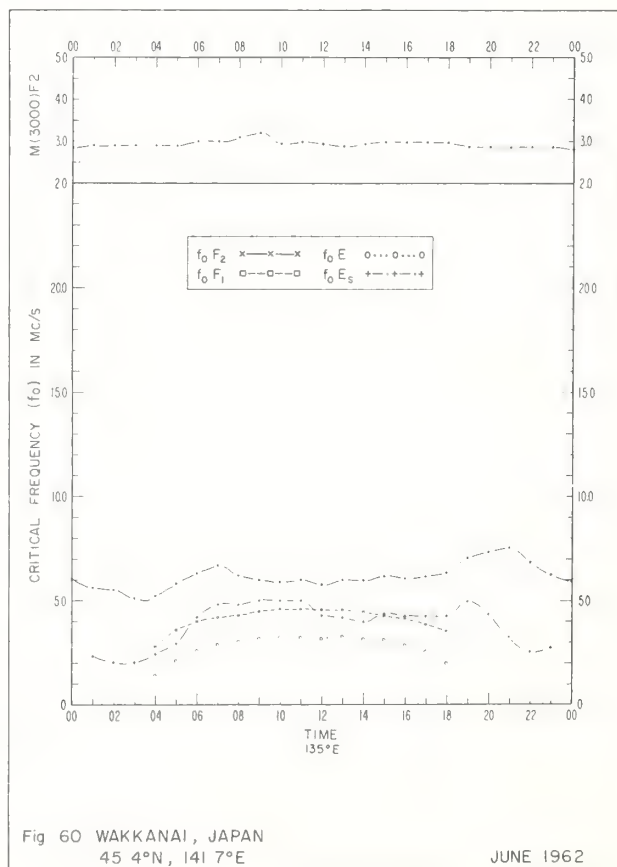
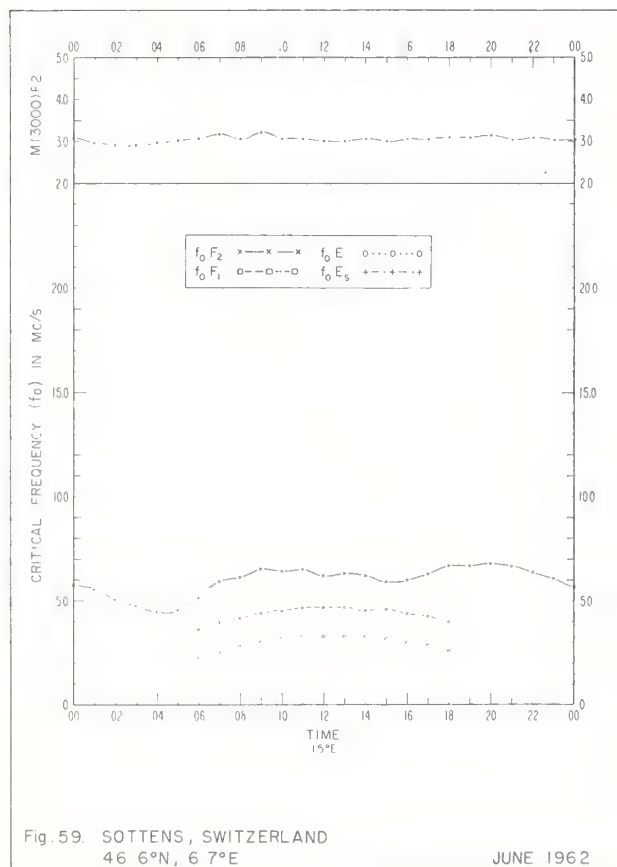
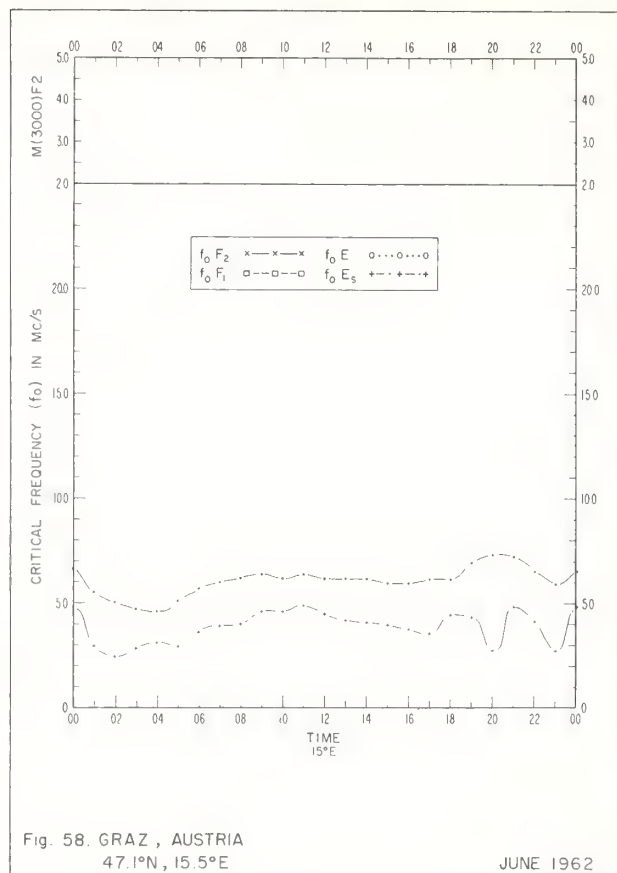
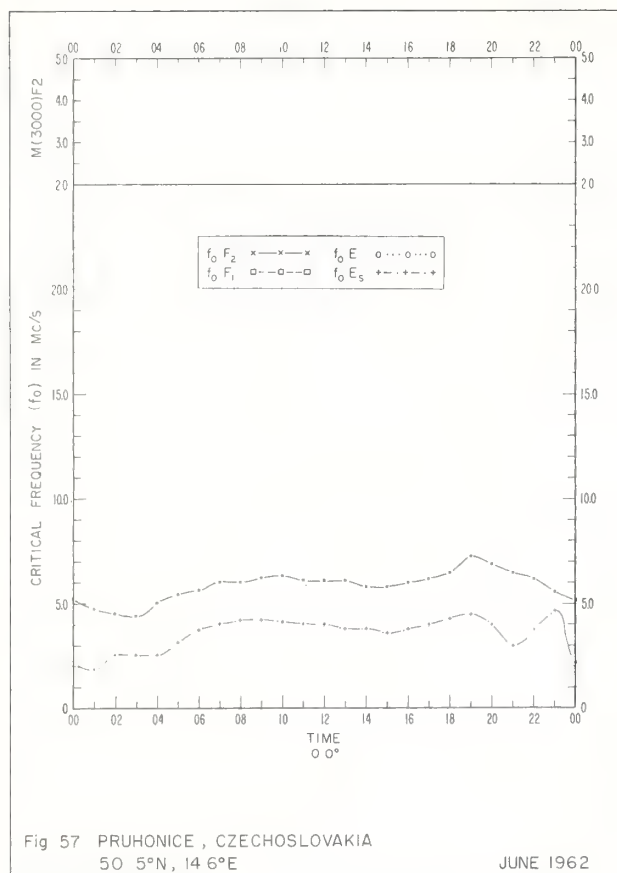


Fig. 48. KIRUNA, SWEDEN  
67.8°N, 20.4°E  
JUNE 1962









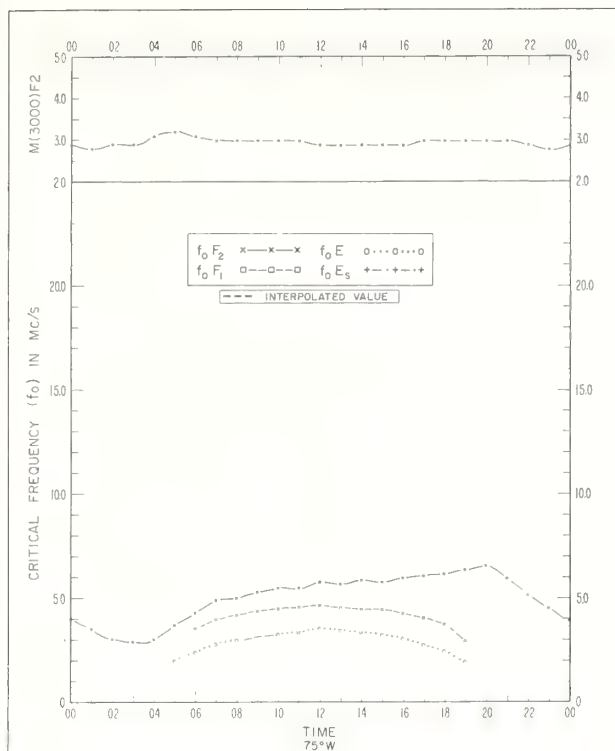


Fig. 61. OTTAWA, CANADA  
45°N, 75°W

JUNE 1962

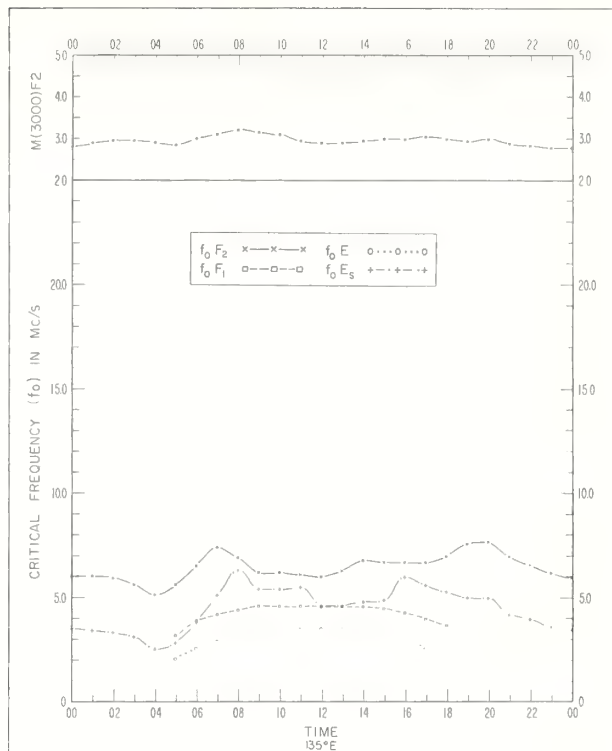


Fig. 62. AKITA, JAPAN  
39°N, 140.1°E

JUNE 1962

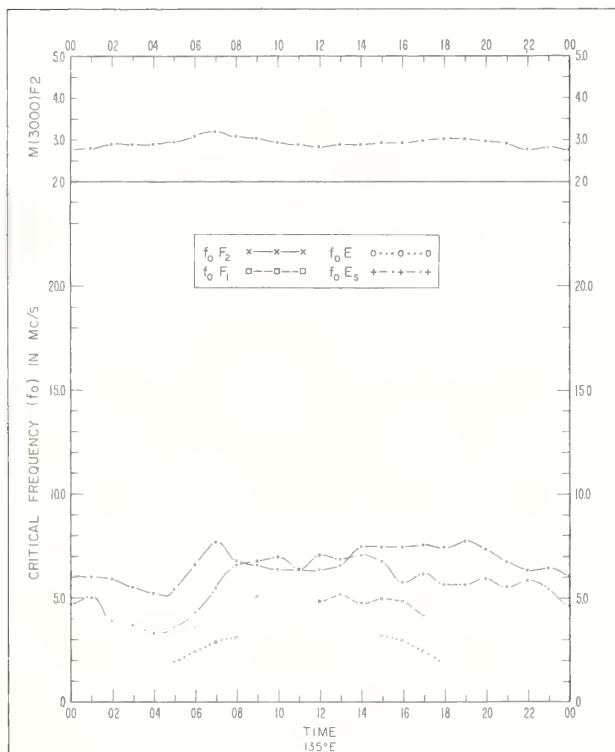


Fig. 63. KOKUBUNJI, TOKYO, JAPAN  
35.7°N, 139.5°E

JUNE 1962

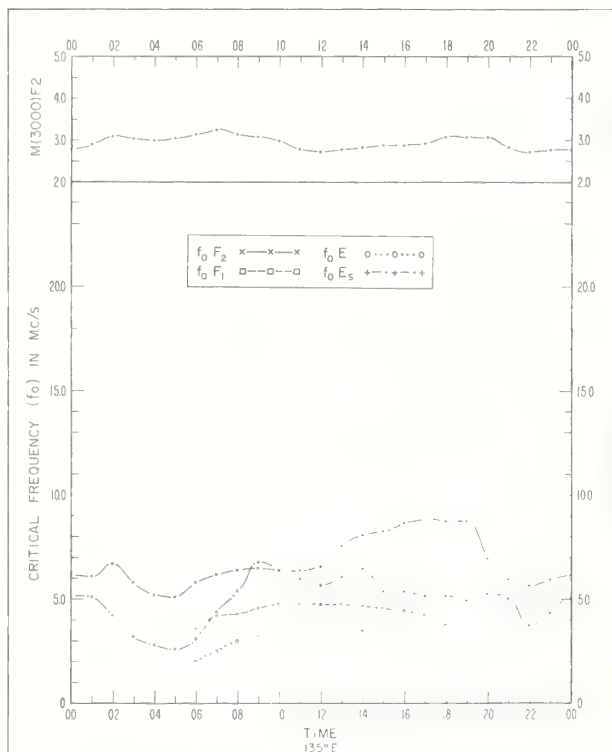
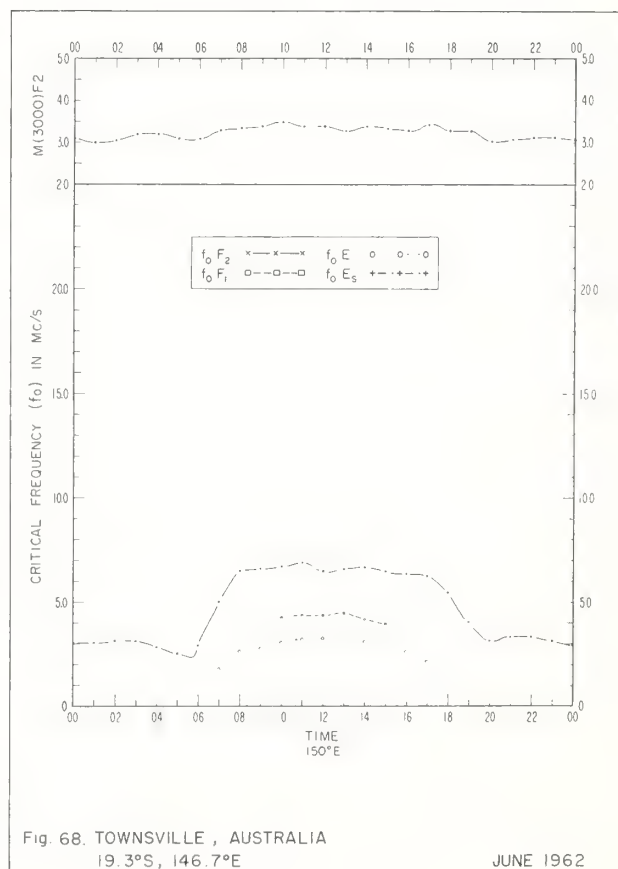
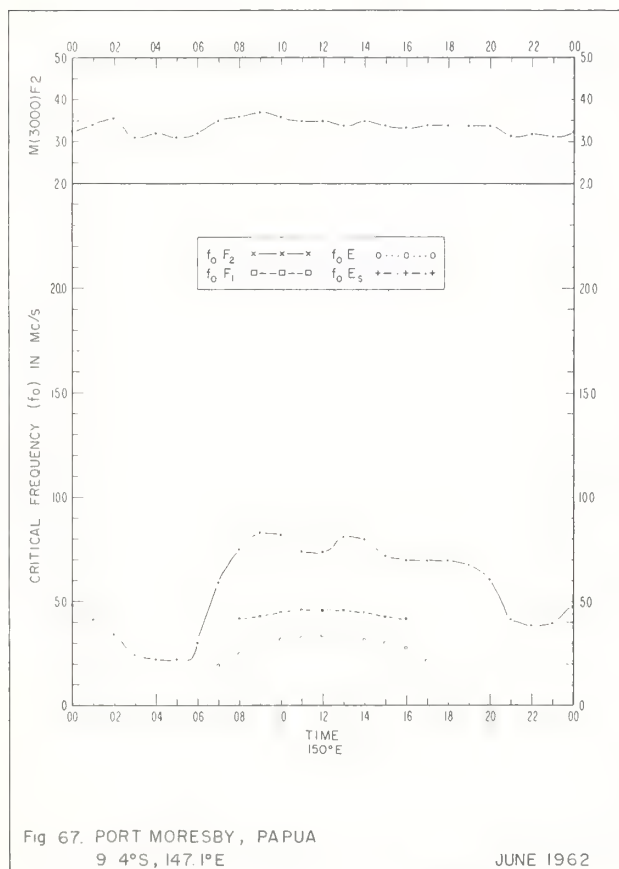
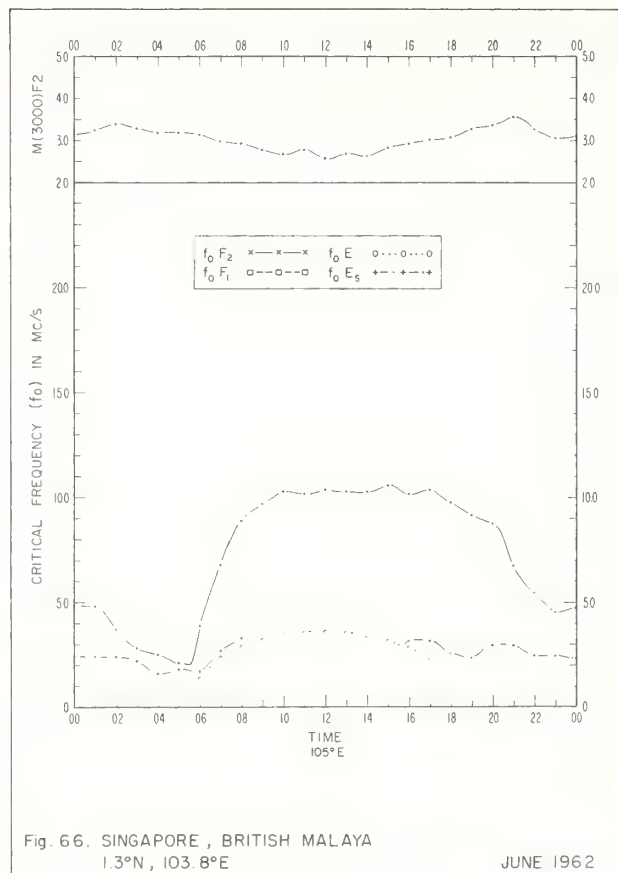
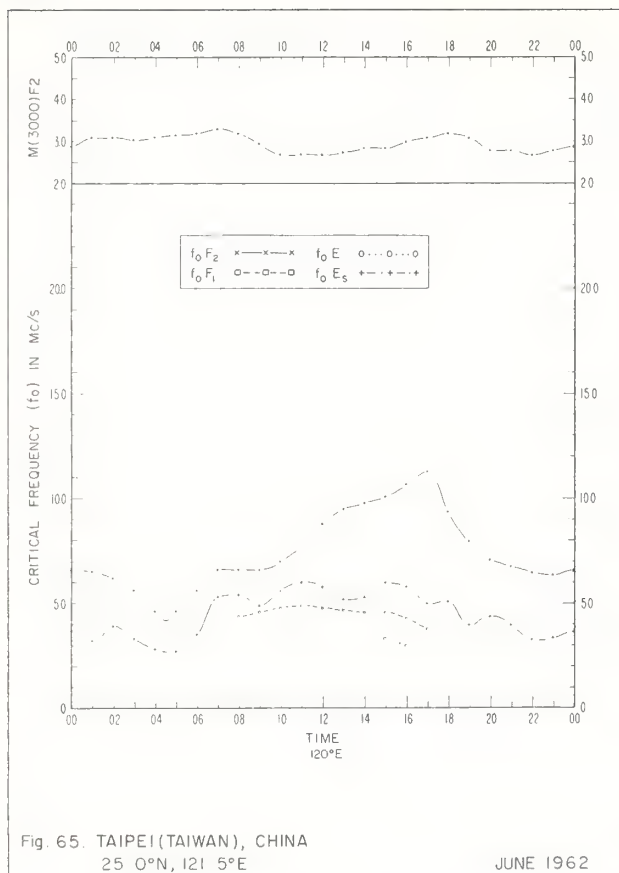
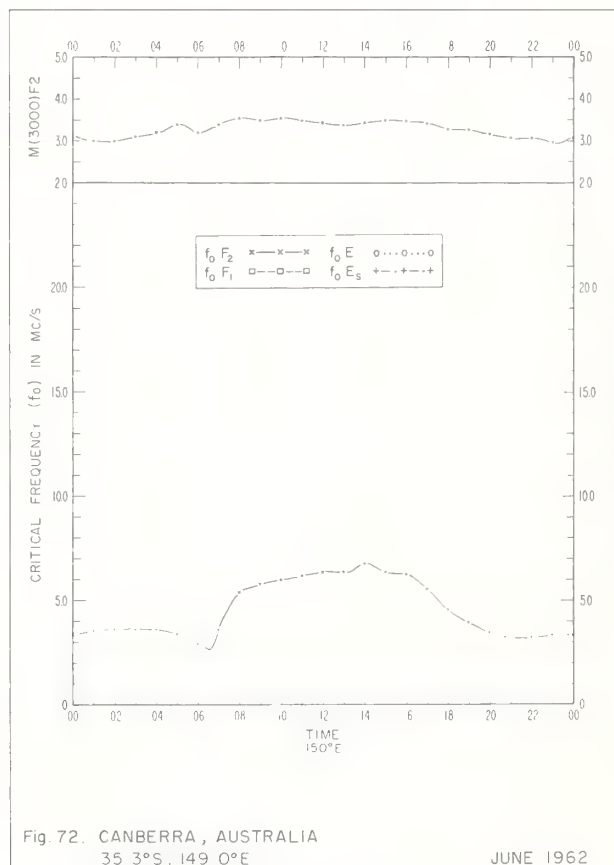
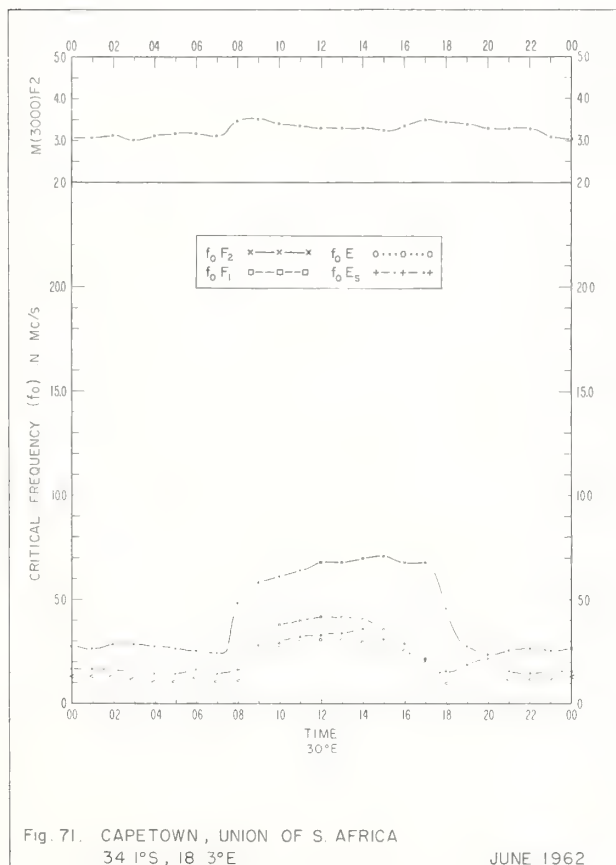
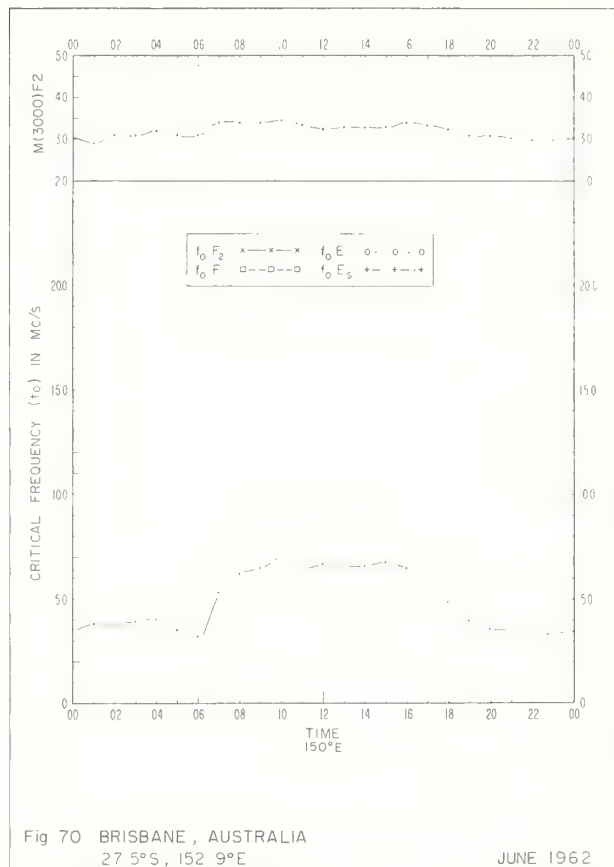
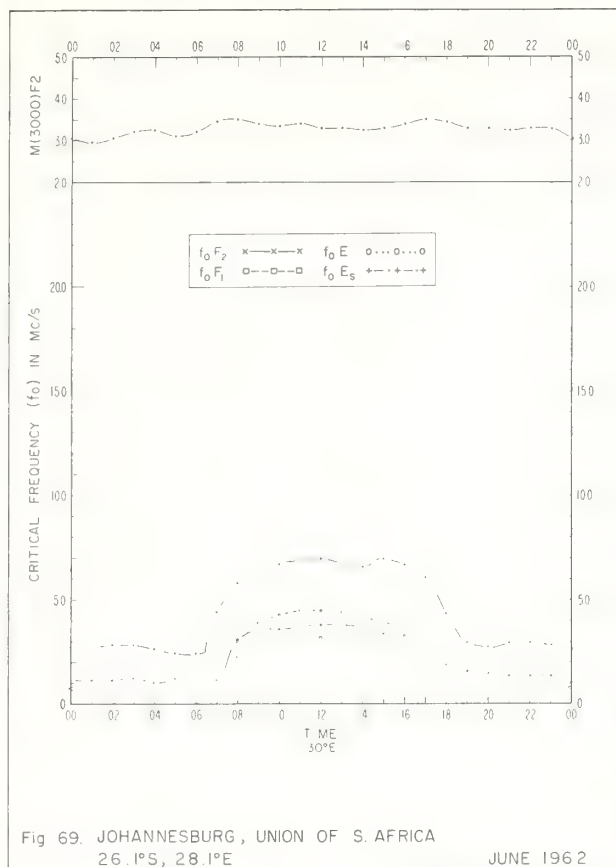


Fig. 64. YAMAGAWA, JAPAN  
31.2°N, 130.6°E

JUNE 1962





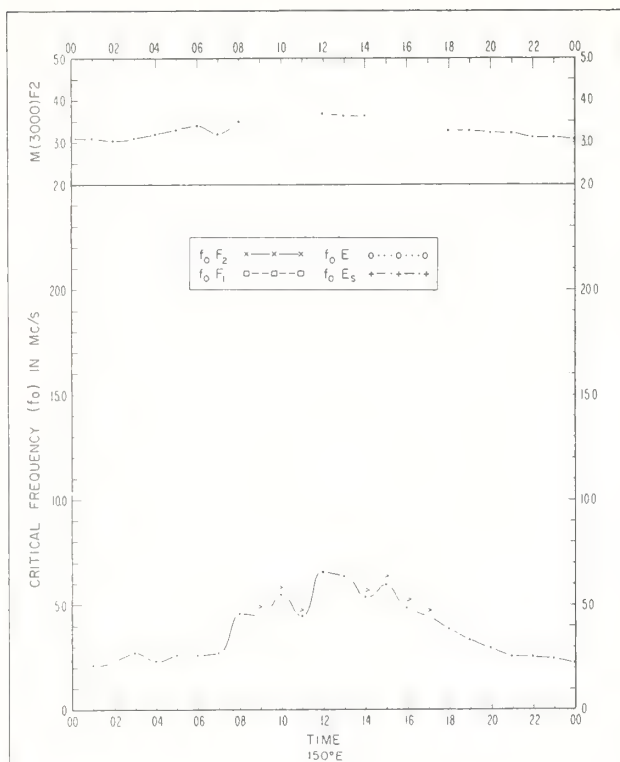


Fig. 73 HOBART, TASMANIA  
42°9'S, 147.2°E

JUNE 1962

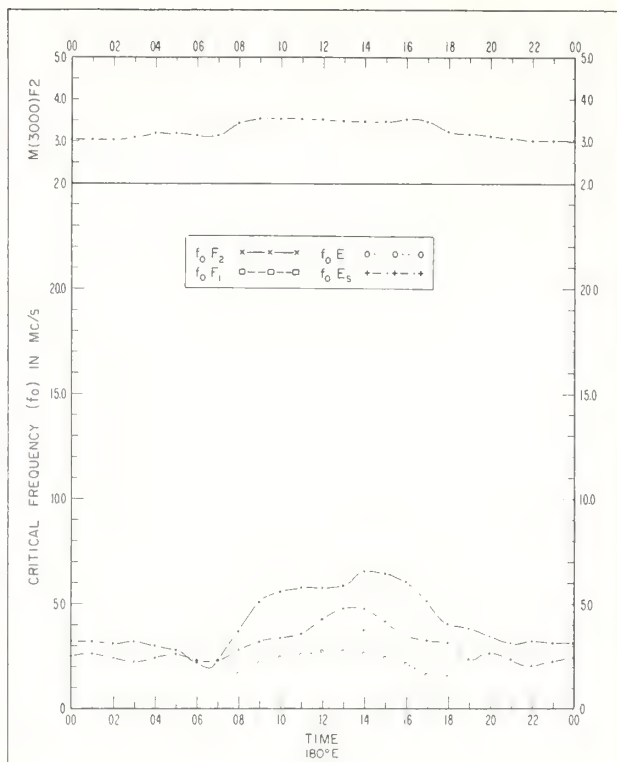


Fig. 74. GODLEY HEAD (CHRISTCHURCH), NEW ZEALAND  
43°6'S, 172.8°E

JUNE 1962

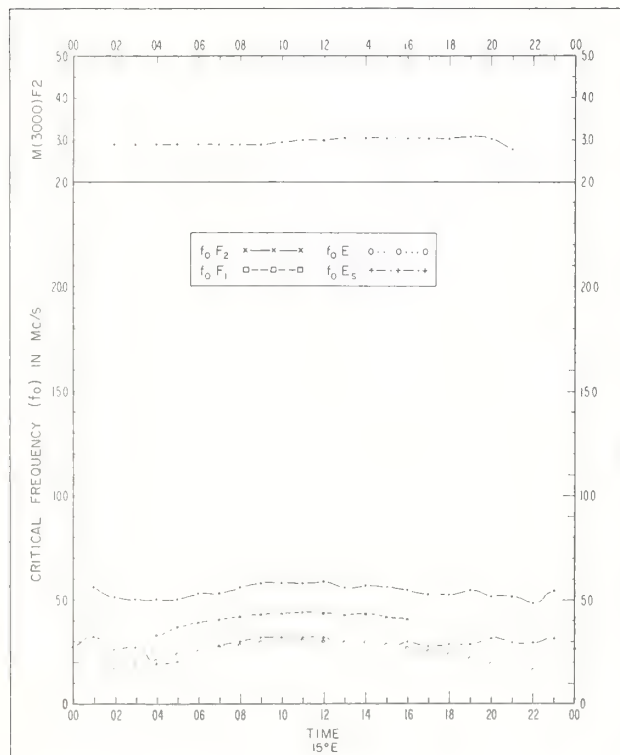


Fig. 75. TROMSØ, NORWAY  
69.7°N, 19°0'E

MAY 1962

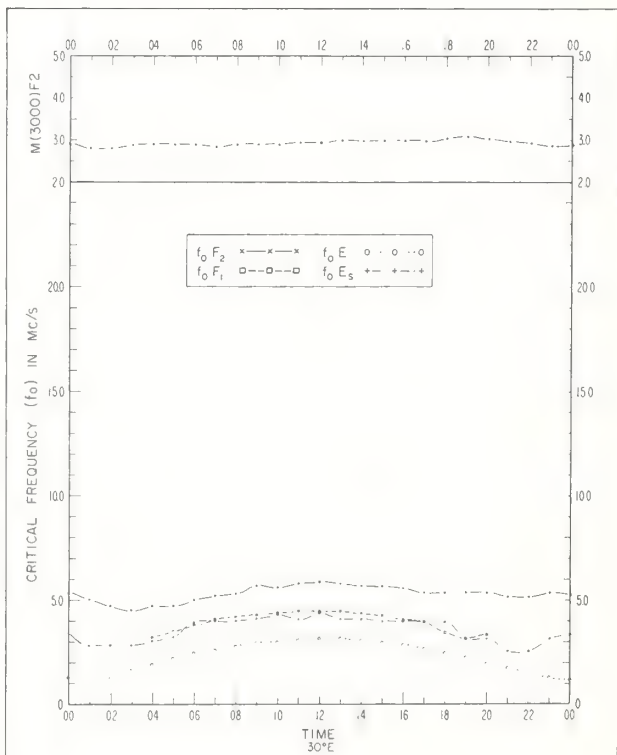


Fig. 76. SODANKYLÄ, FINLAND  
67.4°N, 26.6°E

MAY 1962



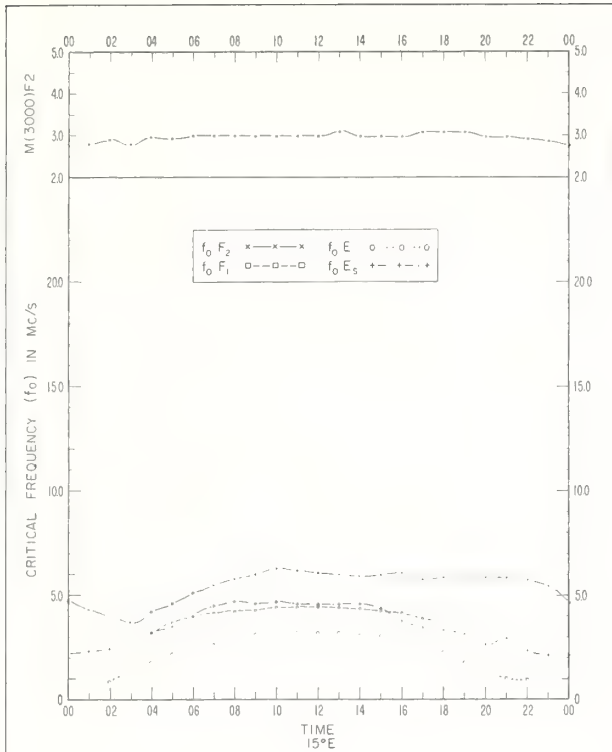


Fig. 77 UPPSALA, SWEDEN  
59.8°N, 17.6°E

MAY 1962

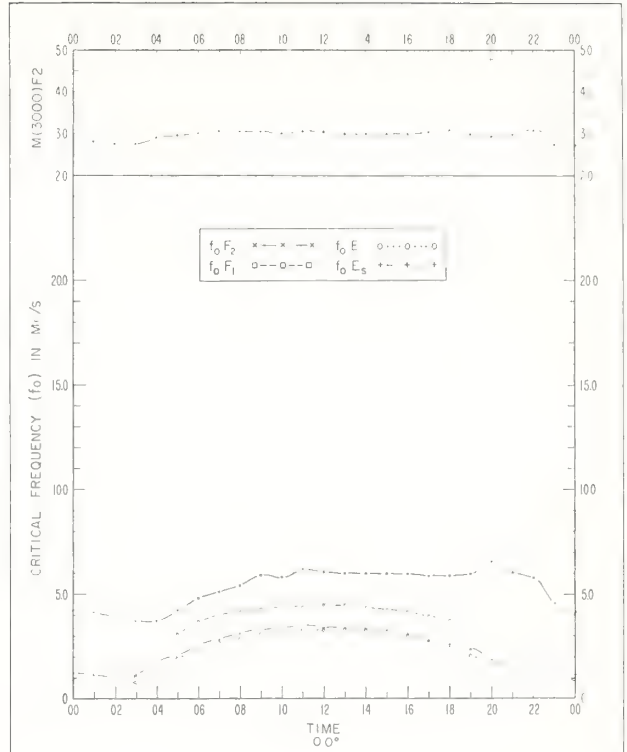


Fig. 78 INVERNESS, SCOTLAND  
57.4°N, 4.2°W

MAY 1962

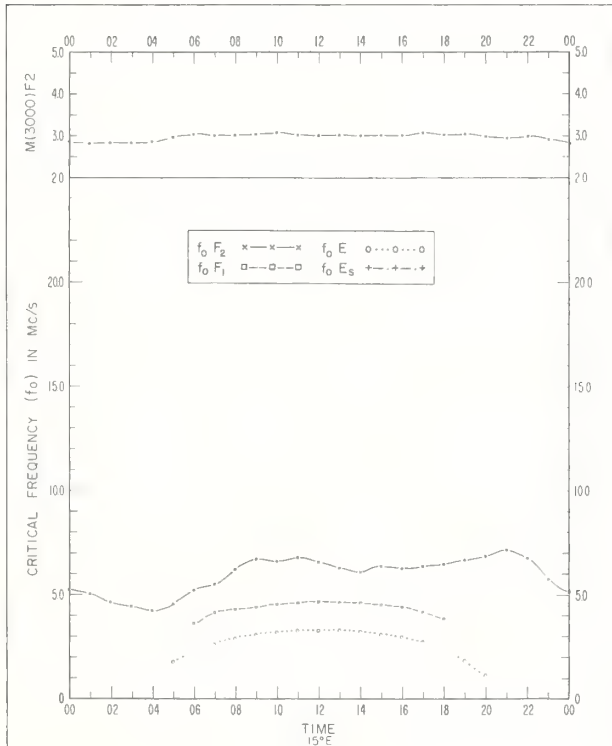


Fig. 79. LINDAU/HARZ, GERMANY  
51.6°N, 10.1°E

MAY 1962

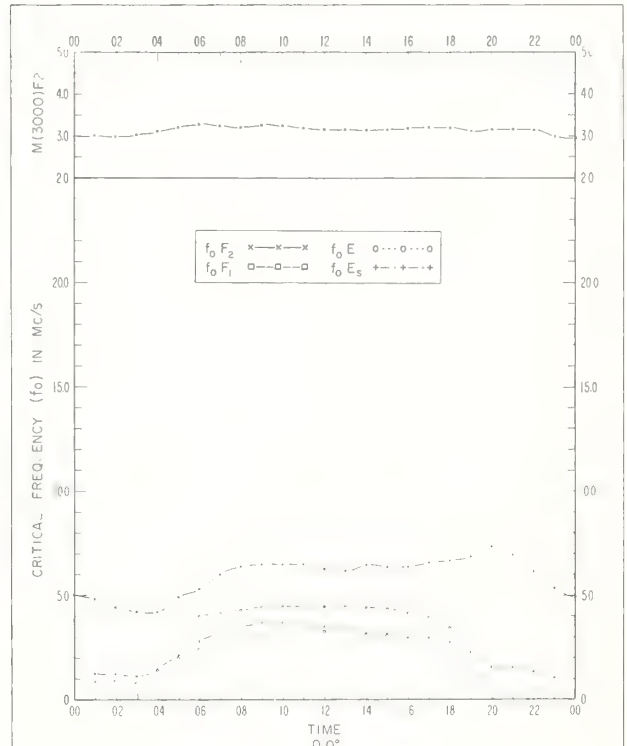
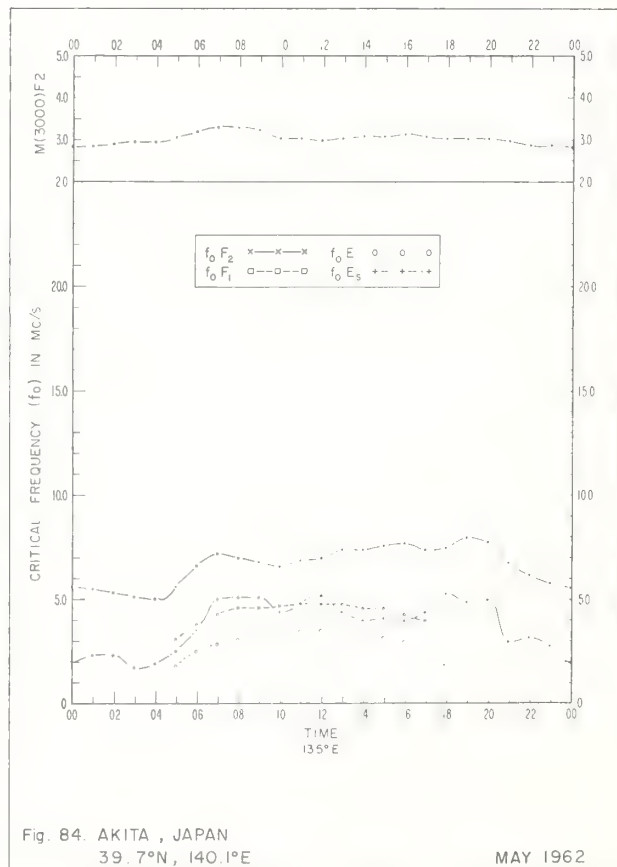
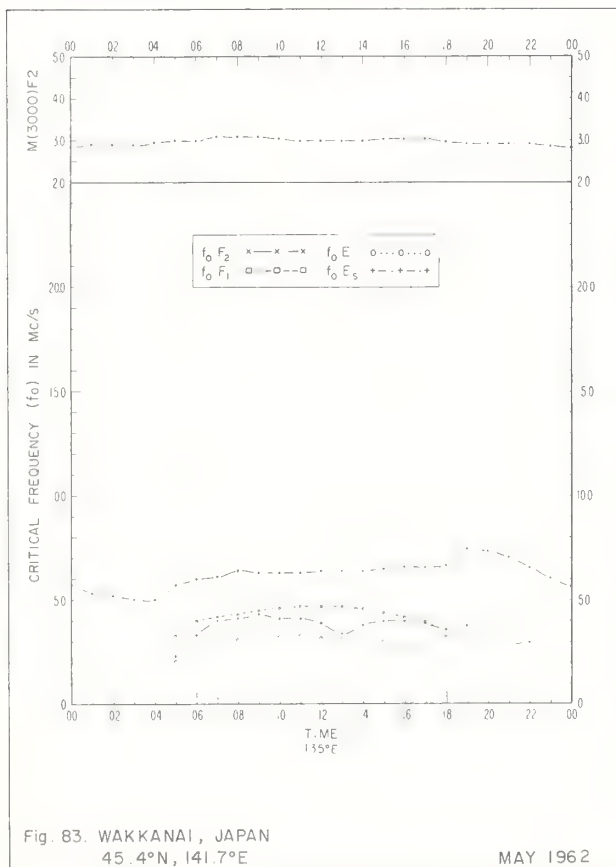
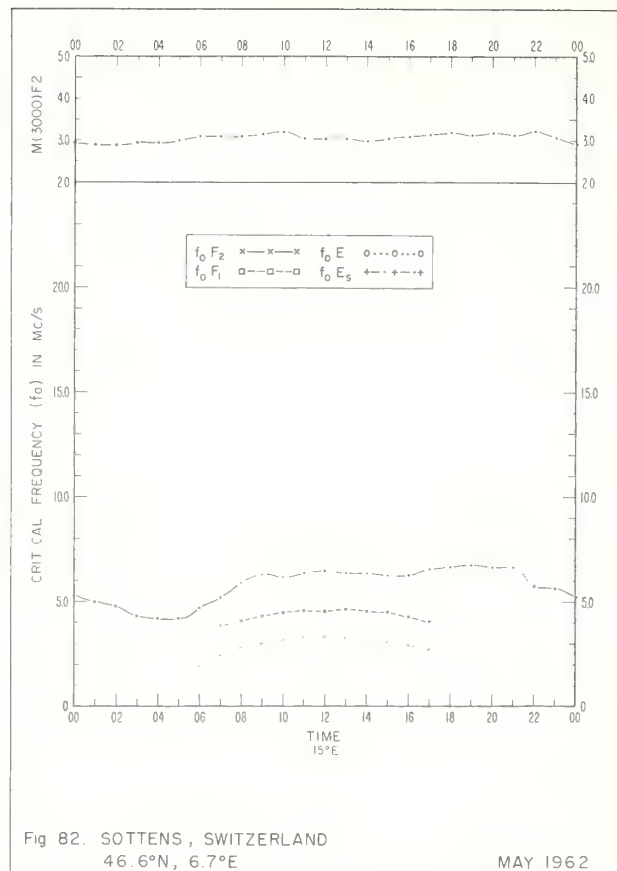
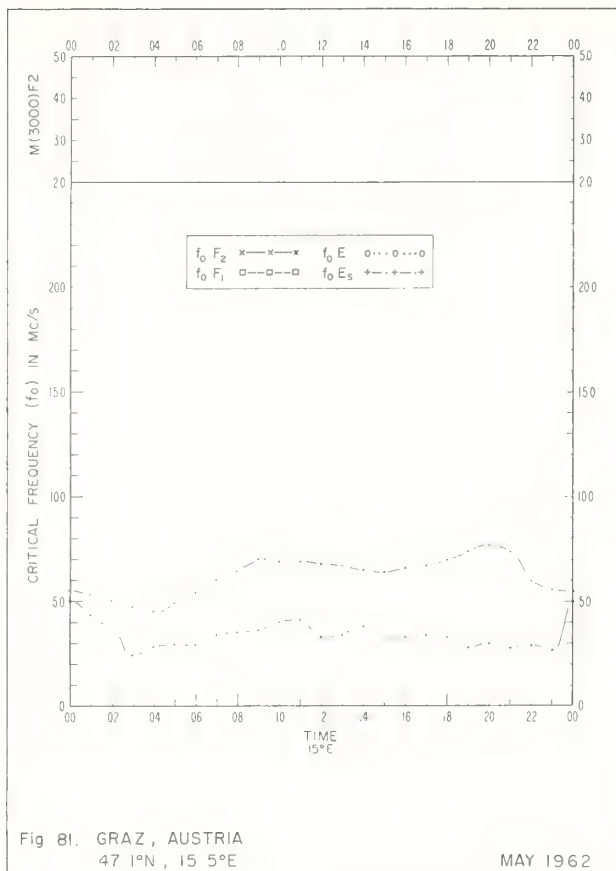
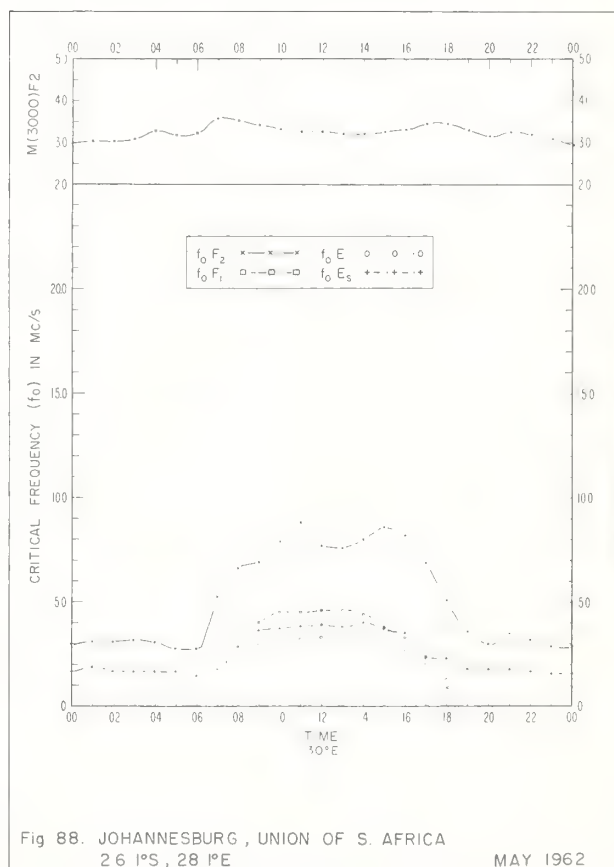
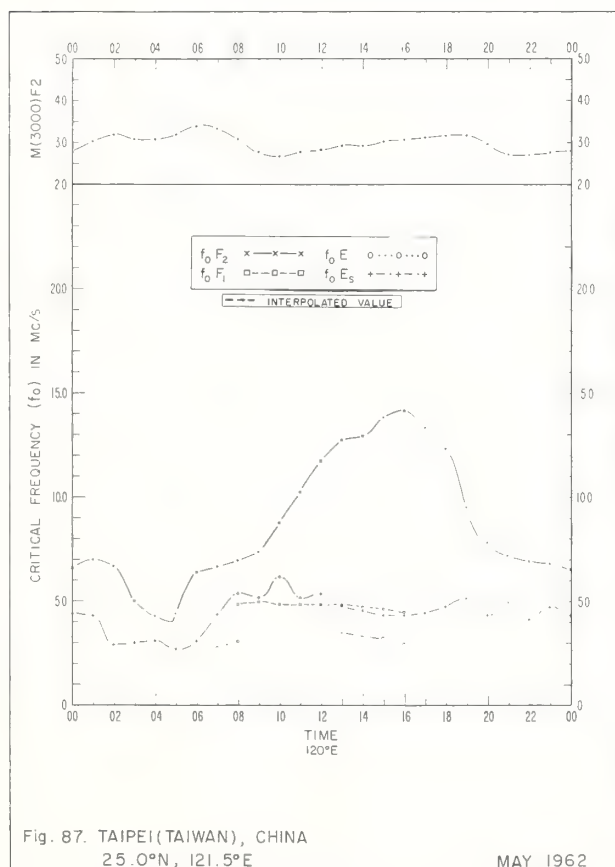
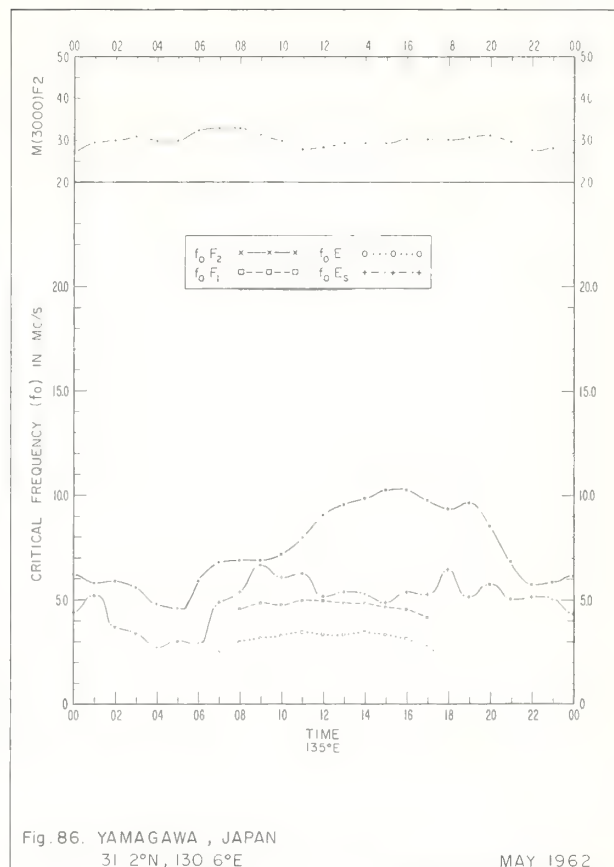
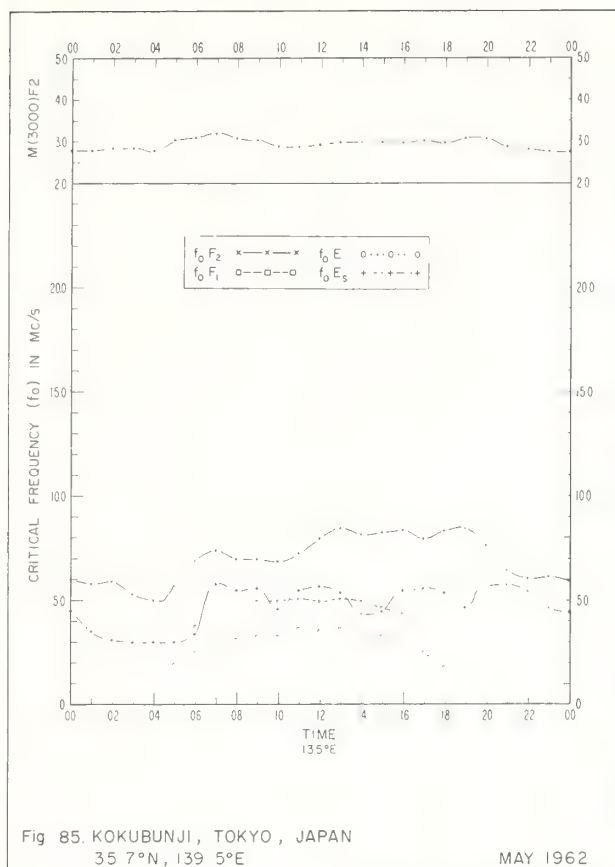


Fig. 80. DOURBES, BELGIUM  
50.1°N, 4.6°E

MAY 1962





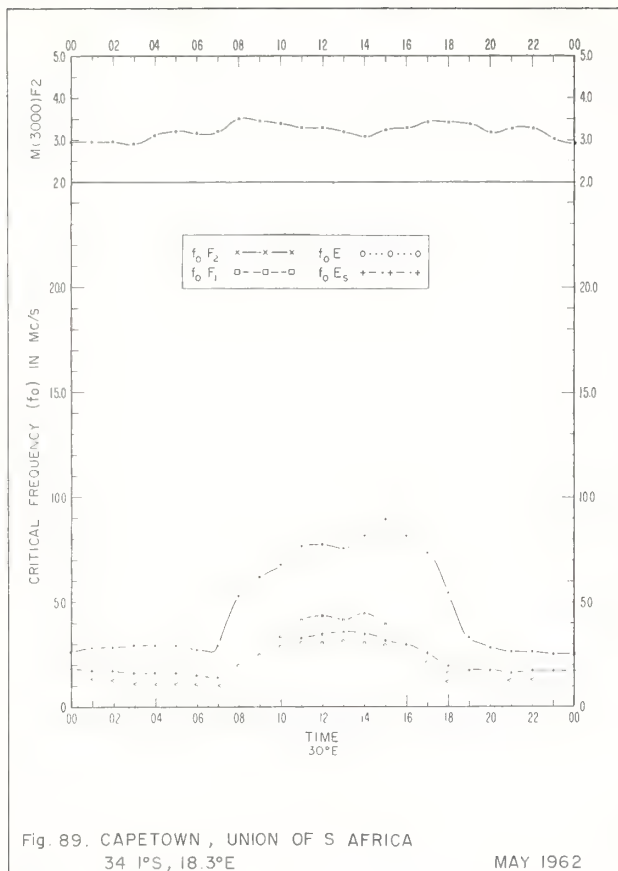


Fig. 89. CAPETOWN, UNION OF S AFRICA  
34 1°S, 18.3°E

MAY 1962

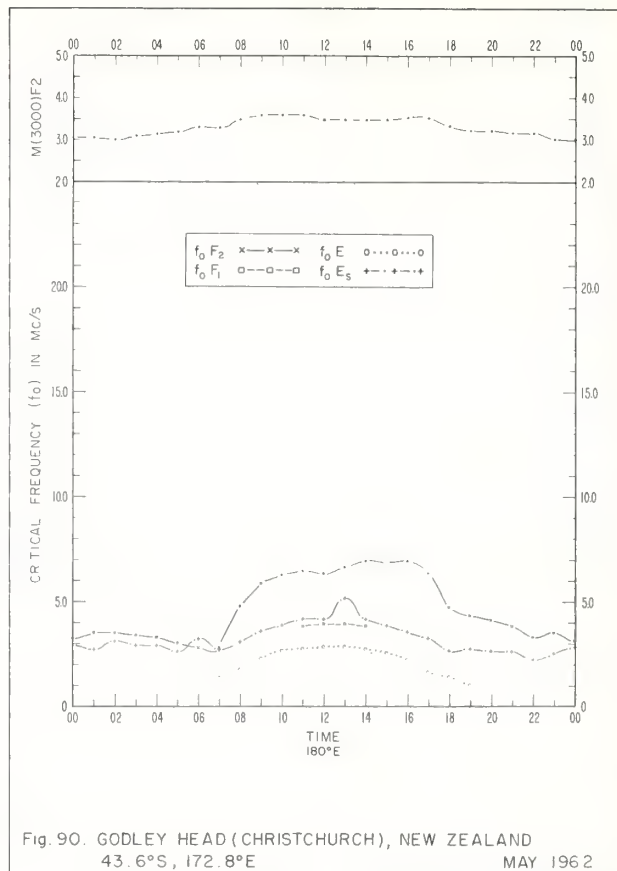


Fig. 90. GODLEY HEAD (CHRISTCHURCH), NEW ZEALAND  
43.6°S, 172.8°E

MAY 1962

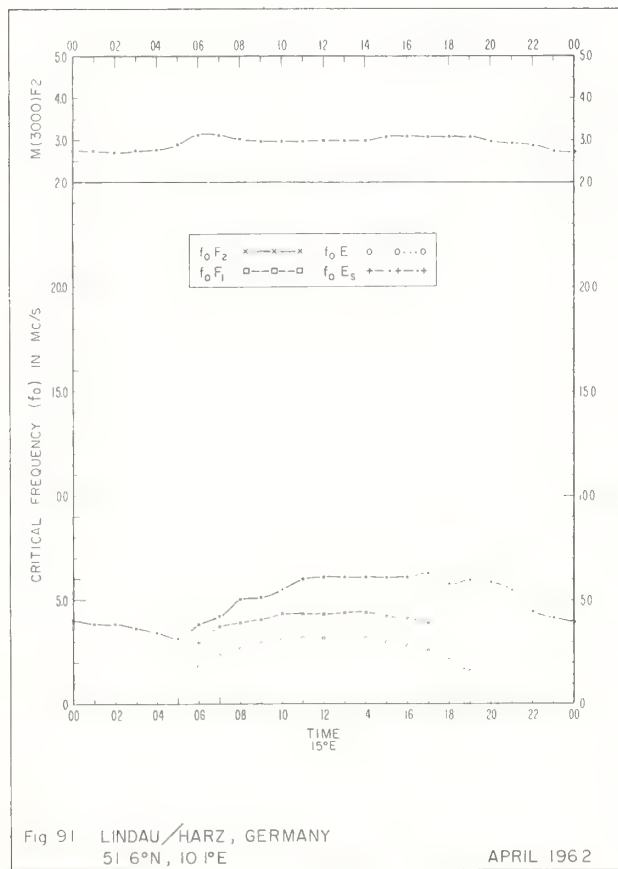


Fig. 91. LINDAU/HARZ, GERMANY  
51 6°N, 10 1°E

APRIL 1962

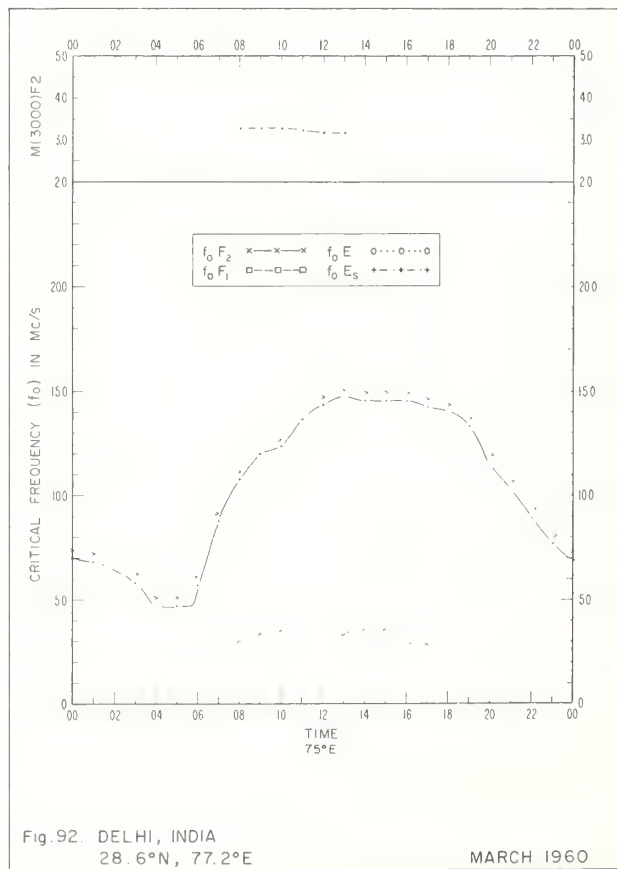
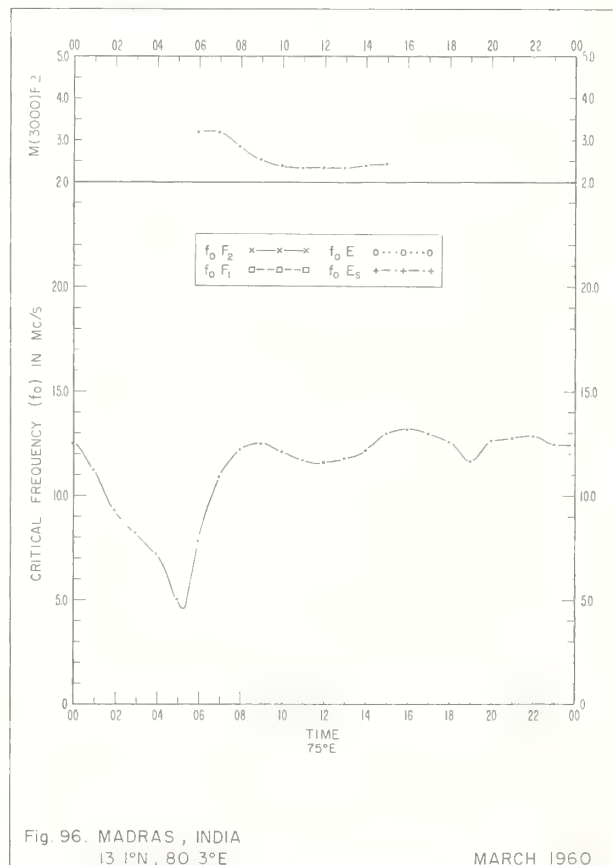
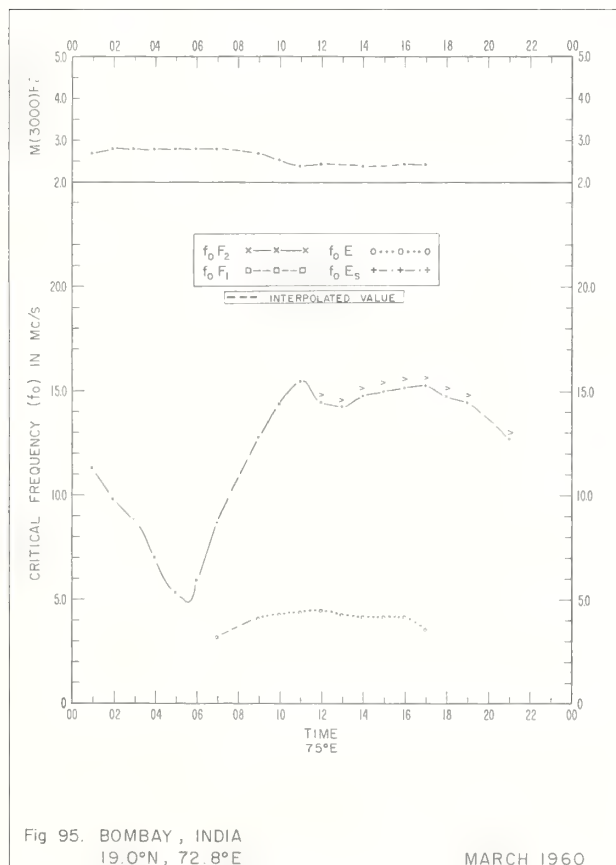
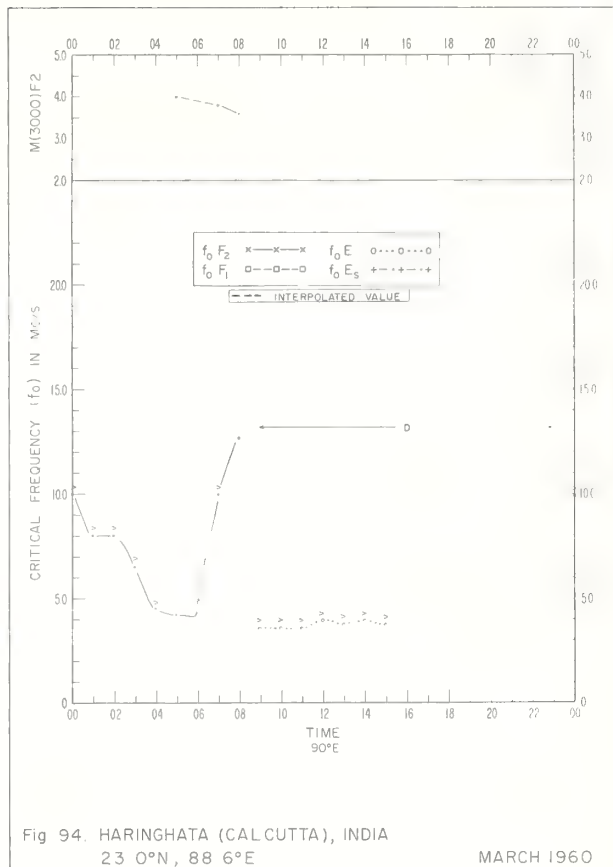
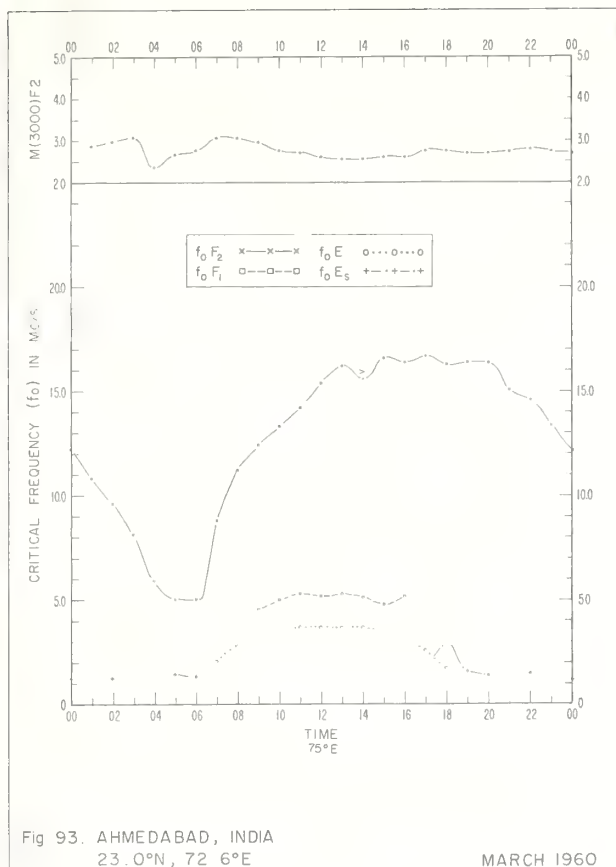


Fig. 92. DELHI, INDIA  
28.6°N, 77.2°E

MARCH 1960





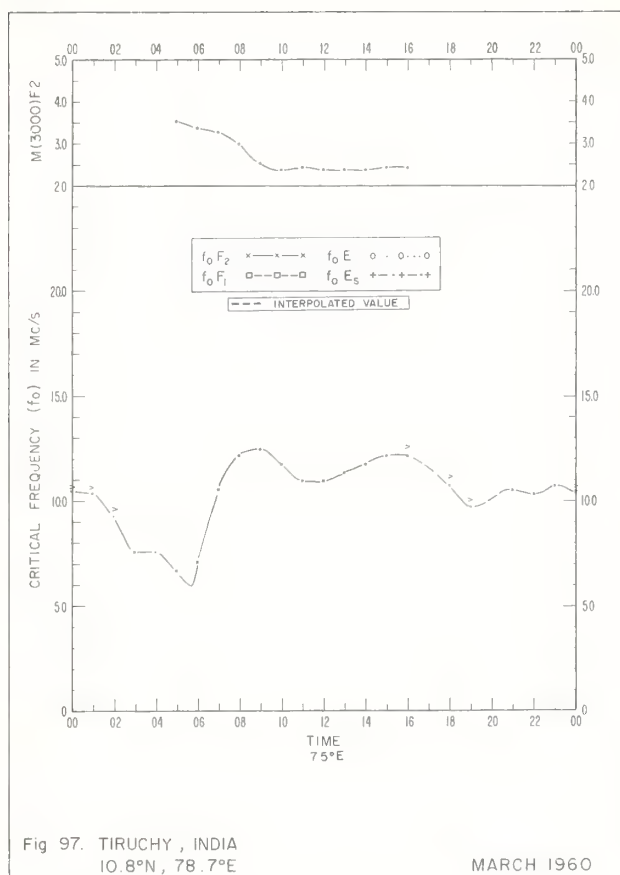


Fig 97. TIRUCHY, INDIA  
10.8°N, 78.7°E

MARCH 1960

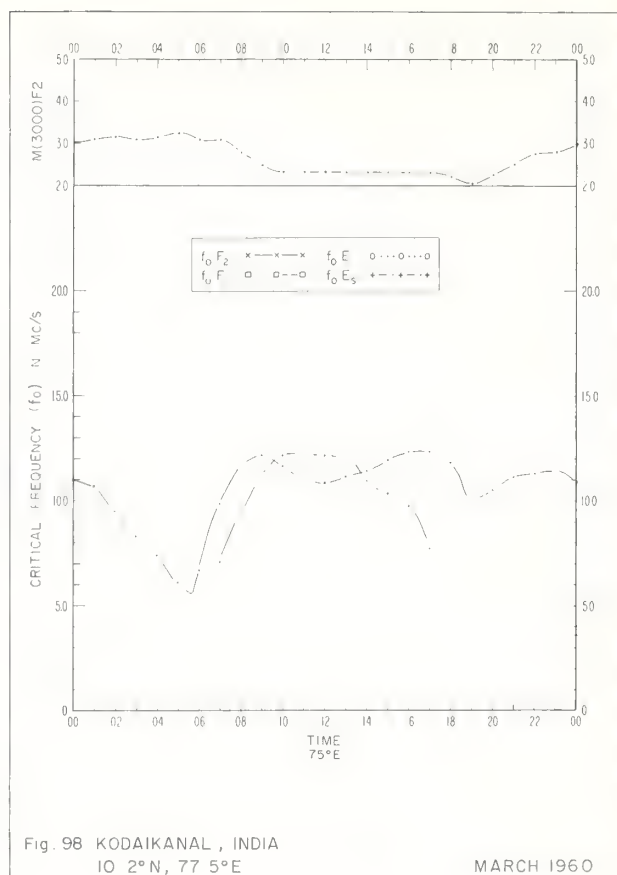


Fig 98 KODAIKANAL, INDIA  
10 2°N, 77 5°E

MARCH 1960

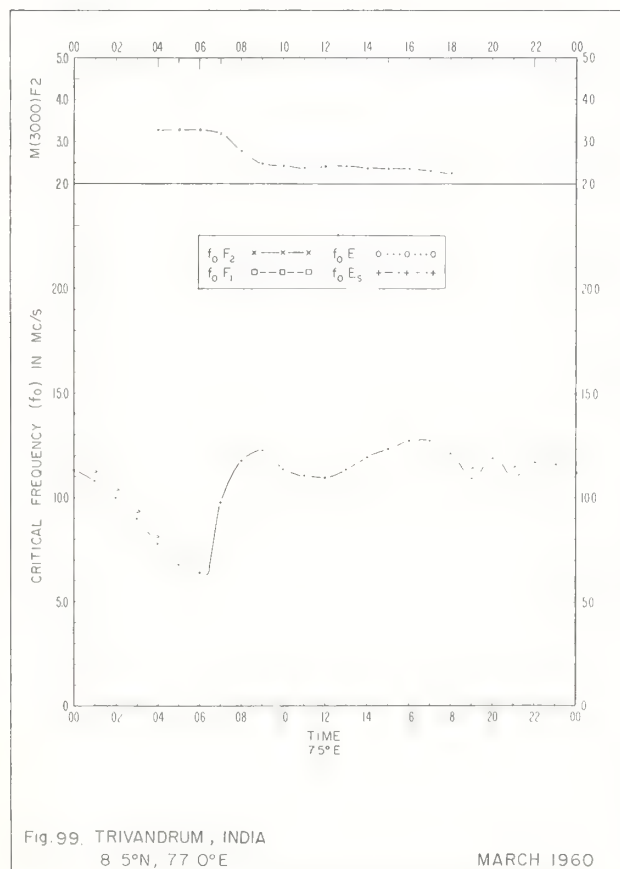


Fig 99. TRIVANDRUM, INDIA  
8 5°N, 77 0°E

MARCH 1960

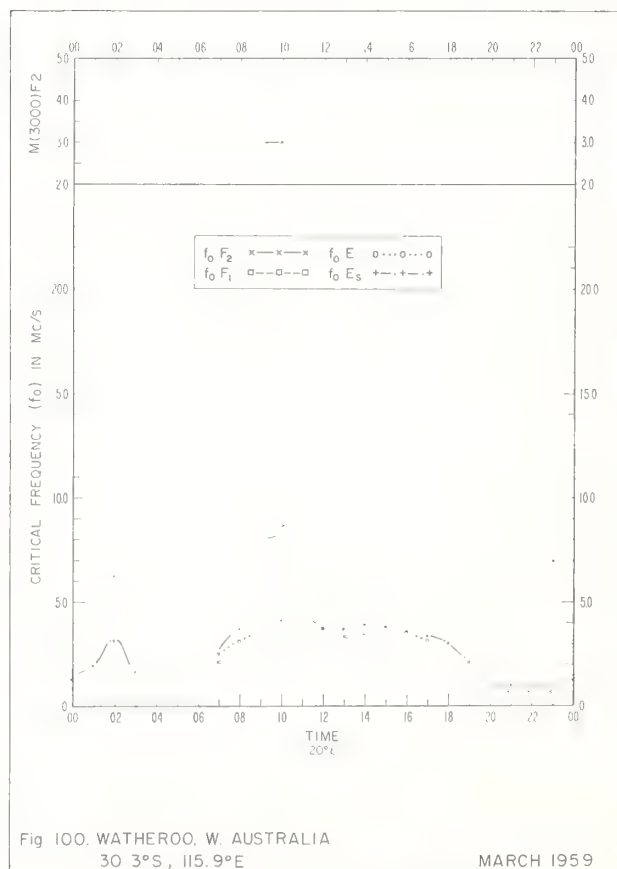


Fig 100. WATHEROO, W. AUSTRALIA  
30 3°S, 115.9°E

MARCH 1959

## INDEX OF IONOSPHERIC DATA IN CRPL F234

|                                  |      |       | PAGE  |        |
|----------------------------------|------|-------|-------|--------|
|                                  |      |       | TABLE | FIGURE |
| ADAK, ALASKA                     | 1963 | MAY   | 2     | 27     |
| AHMEDABAD, INDIA                 | 1960 | MAR.  | 24    | 49     |
| AKITA, JAPAN                     | 1962 | MAY   | 21    | 46     |
|                                  | 1962 | JUNE  | 16    | 41     |
|                                  | 1962 | JULY  | 9     | 34     |
| BOMBAY, INDIA                    | 1960 | MAR.  | 24    | 49     |
| BRISBANE, AUSTRALIA              | 1962 | JUNE  | 18    | 43     |
|                                  | 1962 | JULY  | 11    | 36     |
| CANBERRA, AUSTRALIA              | 1962 | JUNE  | 18    | 43     |
|                                  | 1962 | JULY  | 11    | 36     |
| CAPETOWN, UNION OF S. AFRICA     | 1962 | MAY   | 23    | 48     |
|                                  | 1962 | JUNE  | 18    | 43     |
| CHURCHILL, CANADA                | 1962 | JUNE  | 14    | 39     |
|                                  | 1962 | SEPT. | 5     | 30     |
| DELHI, INDIA                     | 1960 | MAR.  | 23    | 48     |
| DOORBES, BELGIUM                 | 1962 | MAY   | 20    | 45     |
|                                  | 1962 | JUNE  | 14    | 39     |
|                                  | 1962 | JULY  | 9     | 34     |
|                                  | 1962 | SEPT. | 5     | 30     |
|                                  | 1962 | NOV.  | 4     | 29     |
|                                  | 1962 | DEC.  | 3     | 28     |
| FT. MONMOUTH, NEW JERSEY         | 1963 | MAR.  | 3     | 28     |
|                                  | 1963 | JULY  | 1     | 26     |
| GODLEY HEAD (CHRISTCHURCH), N.Z. | 1962 | MAY   | 23    | 48     |
|                                  | 1962 | JUNE  | 19    | 44     |
|                                  | 1962 | JULY  | 12    | 37     |

## INDEX OF IONOSPHERIC DATA IN CRPL F234

|                                  |      |       | PAGE  |        |
|----------------------------------|------|-------|-------|--------|
|                                  |      |       | TABLE | FIGURE |
| GRAZ, AUSTRIA                    | 1962 | MAY   | 21    | 46     |
|                                  | 1962 | JUNE  | 15    | 40     |
|                                  | 1962 | JULY  | 9     | 34     |
|                                  | 1962 | AUG.  | 7     | 32     |
|                                  | 1962 | SEPT. | 6     | 31     |
| HARINGHATA (CALCUTTA), INDIA     | 1960 | MAR.  | 24    | 49     |
| HOBART, TASMANIA                 | 1962 | JUNE  | 19    | 44     |
|                                  | 1962 | JULY  | 11    | 36     |
| INVERNESS, SCOTLAND              | 1962 | MAY   | 20    | 45     |
| JOHANNESBURG, UNION OF S. AFRICA | 1962 | MAY   | 22    | 47     |
|                                  | 1962 | JUNE  | 18    | 43     |
|                                  | 1962 | JULY  | 11    | 36     |
| KIRUNA, SWEDEN                   | 1962 | JUNE  | 12    | 37     |
|                                  | 1962 | JULY  | 8     | 33     |
|                                  | 1962 | AUG.  | 6     | 31     |
| KODAIKANAL, INDIA                | 1960 | MAR.  | 25    | 50     |
| KOKUBUNJI, TOKYO, JAPAN          | 1962 | MAY   | 22    | 47     |
|                                  | 1962 | JUNE  | 16    | 41     |
|                                  | 1962 | JULY  | 10    | 35     |
| LINDAU/HARZ, GERMANY             | 1962 | APR.  | 23    | 48     |
|                                  | 1962 | MAY   | 20    | 45     |
|                                  | 1962 | JUNE  | 14    | 39     |
|                                  | 1962 | JULY  | 8     | 33     |
| LULEA, SWEDEN                    | 1962 | JUNE  | 13    | 38     |
|                                  | 1962 | JULY  | 8     | 33     |
|                                  | 1962 | AUG.  | 7     | 32     |
| LYCKSELE, SWEDEN                 | 1962 | JUNE  | 13    | 38     |
|                                  | 1962 | JULY  | 8     | 33     |
|                                  | 1962 | AUG.  | 7     | 32     |

# INDEX OF IONOSPHERIC DATA IN CRPL F234

PAGE  
TABLE FIGURE

|                           |      |       |    |    |
|---------------------------|------|-------|----|----|
| LYCKSELE, SWEDEN          | 1962 | SEPT. | 4  | 29 |
|                           | 1962 | OCT.  | 4  | 29 |
| MADRAS, INDIA             | 1960 | MAR.  | 24 | 49 |
| MAUI, HAWAII              | 1963 | MAY   | 2  | 27 |
| NURMIJARVI, FINLAND       | 1962 | JUNE  | 13 | 38 |
|                           | 1962 | SEPT. | 5  | 30 |
|                           | 1962 | NOV.  | 3  | 28 |
| OKINAWA I.                | 1963 | MAY   | 2  | 27 |
|                           | 1963 | JUNE  | 1  | 26 |
| OTTAWA, CANADA            | 1962 | JUNE  | 16 | 41 |
|                           | 1962 | SEPT. | 6  | 31 |
| PORT MORESBY, PAPUA       | 1962 | JUNE  | 17 | 42 |
|                           | 1962 | JULY  | 10 | 35 |
| PRUHONICE, CZECHOSLOVAKIA | 1962 | JUNE  | 15 | 40 |
| RESOLUTE BAY, CANADA      | 1962 | JUNE  | 12 | 37 |
|                           | 1962 | SEPT. | 4  | 29 |
| REYKJAVIK, ICELAND        | 1963 | MAY   | 1  | 26 |
| SINGAPORE, BRITISH MALAYA | 1962 | JUNE  | 17 | 42 |
| SODANKYLA, FINLAND        | 1962 | MAY   | 19 | 44 |
|                           | 1962 | JUNE  | 13 | 38 |
| SOTTENS, SWITZERLAND      | 1962 | MAY   | 21 | 46 |
|                           | 1962 | JUNE  | 15 | 40 |
|                           | 1962 | SEPT. | 6  | 31 |
| ST. JOHNS, NEWFOUNDLAND   | 1962 | SEPT. | 5  | 30 |



## INDEX OF IONOSPHERIC DATA IN CRPL F234

|                         |      |      | PAGE  |        |
|-------------------------|------|------|-------|--------|
|                         |      |      | TABLE | FIGURE |
| TAIPEI (TAIWAN), CHINA  | 1962 | MAY  | 22    | 47     |
|                         | 1962 | JUNE | 17    | 42     |
|                         | 1962 | JULY | 10    | 35     |
|                         | 1962 | AUG. | 7     | 32     |
| TALARA, PERU            | 1963 | FEB. | 3     | 28     |
|                         | 1963 | APR. | 2     | 27     |
| TIRUCHY, INDIA          | 1960 | MAR. | 25    | 50     |
| TOWNSVILLE, AUSTRALIA   | 1962 | JUNE | 17    | 42     |
| TRIVANDRUM, INDIA       | 1960 | MAR. | 25    | 50     |
| TROMSO, NORWAY          | 1962 | MAY  | 19    | 44     |
|                         | 1962 | JUNE | 12    | 37     |
| UPPSALA, SWEDEN         | 1962 | MAY  | 20    | 45     |
|                         | 1962 | JUNE | 14    | 39     |
| WAKKANAI, JAPAN         | 1962 | MAY  | 21    | 46     |
|                         | 1962 | JUNE | 15    | 40     |
|                         | 1962 | JULY | 9     | 34     |
| WATHEROO, AUSTRALIA     | 1959 | MAR. | 25    | 50     |
| WHITE SANDS, NEW MEXICO | 1963 | JULY | 1     | 26     |
| YAMAGAWA, JAPAN         | 1962 | MAY  | 22    | 47     |
|                         | 1962 | JUNE | 16    | 41     |
|                         | 1962 | JULY | 10    | 35     |

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A catalog of records and data on file at the U.S. IGY World Data Center A for Airglow and Ionosphere, Boulder Laboratories, National Bureau of Standards, Boulder, Colorado, which includes a fee schedule to cover the cost of supplying copies, is available upon request.

CRPL-F (Part A), "Ionospheric Data."

CRPL-F (Part B), "Solar Geophysical Data."

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National Bureau of Standards Handbook 90, "Handbook for CRPL Ionospheric Predictions Based on Numerical Methods of Mapping." Price 40 cents.

National Bureau of Standards Circular 462, "Ionospheric Radio Propagation." Price \$1.25.

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